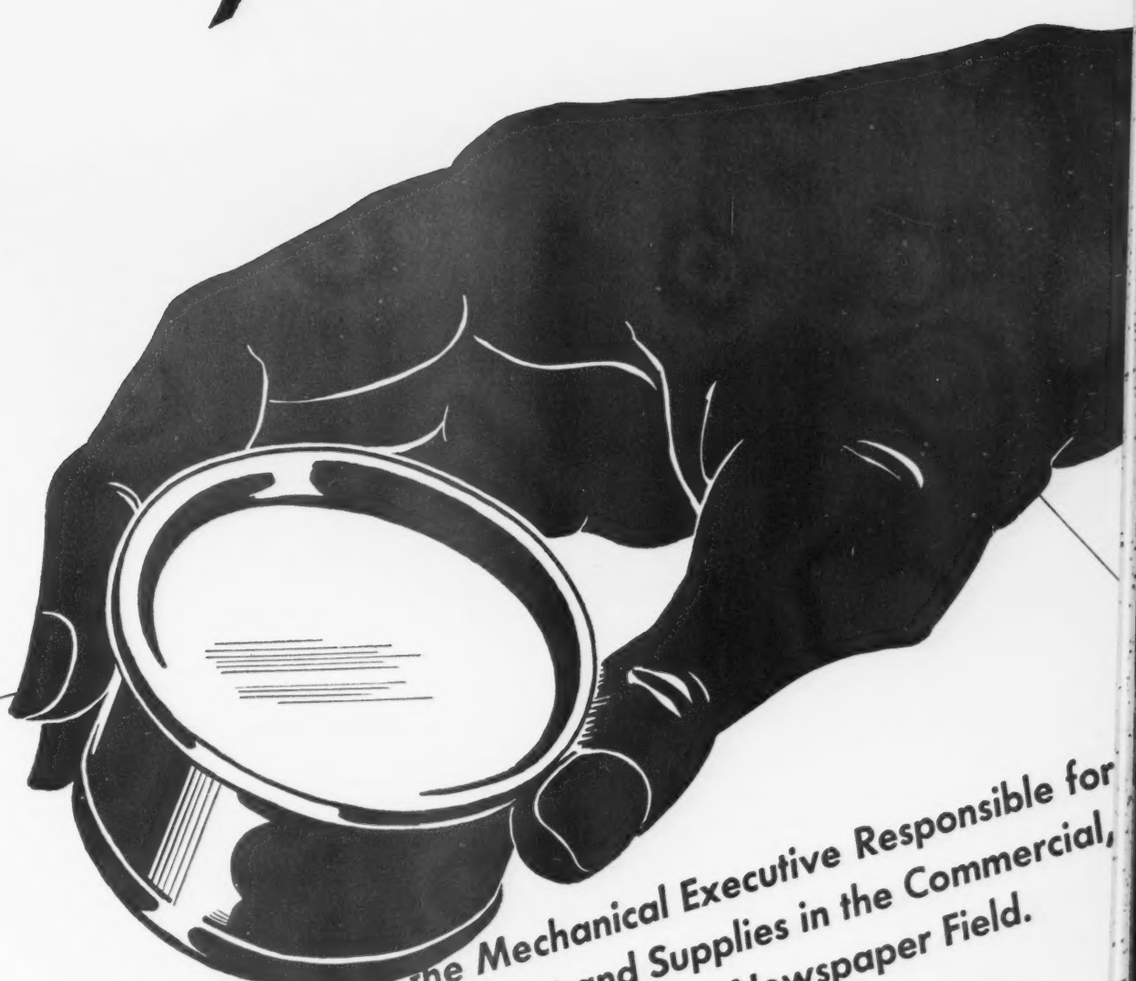
PRINTING EQUIPMENT *Engineer*

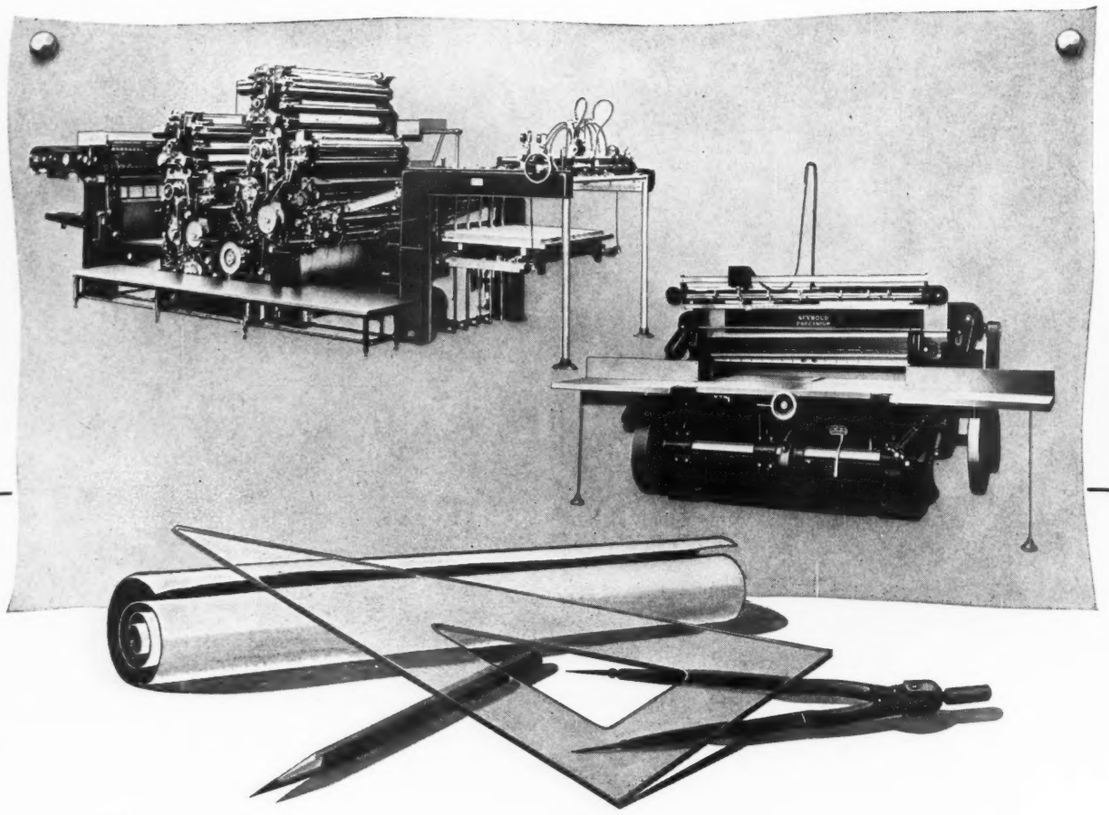


A Technical Publication for the Mechanical Executive Responsible for Printing Production, Equipment and Supplies in the Commercial, Magazine, Private Plant and Daily Newspaper Field.

NOVEMBER, 1942

ENGINEERED BY THE SAME CODE OF

Precision Craftsmanship



The greatest advancement in the mechanics surrounding the printed word has taken place during the past twenty-five years. During this time our Engineering organization has established a continuous record of improvement, attaining finally in the production of both printing press and bindery equipment that realization of *precision* which is the highest honor in craftsmanship and the greatest merit in performance. One code of constructive engineering thought governs all HARRIS-SEYBOLD-POTTER COMPANY products. Right now our entire production facilities are engaged in war work. But after victory we shall return stronger than ever to pick up the suspended task of regular service to the printers of America and of the world.

HARRIS · SEYBOLD · POTTER · COMPANY

HARRIS DIVISION

CLEVELAND, OHIO

MANUFACTURERS OF OFFSET LITHOGRAPHIC • LETTERPRESS AND GRAVURE PRINTING MACHINERY • • • • • •

SEYBOLD DIVISION

DAYTON, OHIO

MANUFACTURERS OF PAPER CUTTERS AND TRIMMERS • KNIFE GRINDERS • DIE PRESSES • WRIGHT DRILLS • MORRISON STITCHERS

Prevent Accidents

CONSERVE PRINTING'S MANPOWER

And Help Win the War

America needs every man it can put to work on the production of the munitions and supplies it must have to *win the war.* In 1943 employment on war production will go well beyond the twenty million mark—two times as many as are now so employed. These will include men skilled in more than 100 different necessary occupations—all bending their efforts toward a common end. At the same time the armed forces of the nation will probably be increased to ten million men or more, and additional millions must be taken from other occupations to help harvest our food and industrial crops.

The Printing Industry, as well as other industries classed as non-essential to the war effort, will be called upon to supply some of these men who will be trained in new trades and occupations vital to Victory. Those who remain at work turning out the printing which the then-prevailing conditions will require must devote every possible hour to production.

Employing Printers and employees in printing plants can make a valuable contribution to our nation's needs by helping to prevent loss of time through sickness and accidents. Every hour saved for additional production is a direct contribution toward winning the war.

We suggest the appointment in each printing plant of a joint committee representing men and management to conserve our industry's manpower by safeguarding its health and preventing accidental injury. At least 75 per cent of productive time now thus lost can be saved. *Let's save it and help win the war!*

Conserve Printing's Manpower

LANSTON MONOTYPE MACHINE COMPANY

MONOTYPE BUILDING, TWENTY-FOURTH AND LOCUST STREETS, PHILADELPHIA, PENNA.

Composed in Monotype Vellum, No. 412, Stylescript, No. 425, and Stymie Medium, No. 290JK

Release No. 7

Issued by Printing and Publishing Branch, War Production Board, contains revised discussion on regulations and orders affecting the printing industry

WAR Production Board regulations and orders which directly concern the Printing and Publishing Industry were brought up to date on October 21 by George A. Renard, Chief of Printing and Publishing Branch. This is the seventh of a series of releases designed to keep members of the industry acquainted with the availability of materials, etc. involved in manufacturing operations.

Copies of any orders or releases mentioned herein may be obtained from local WPB offices, or by writing the *WAR PRODUCTION BOARD, Division of Information*, Room 1501, Social Security Building, Washington, D. C.

The purpose of this release is to draw your attention to orders and information issued by the War Production Board and affecting the printing and publishing industries. This release is intended only to serve as a reminder and nothing in it is to be construed as an official interpretation or explanation of any order issued by the War Production Board, and it is not to be used as a digest of existing orders of the War Production Board. In any specific case, you are cautioned to refer to the order in question.

COMPLIANCE: A check into the operations of manufacturing users of iron and steel who are subject to General Conservation Order M-126 is being carried out by the Compliance Branch of WPB. This conservation order prohibits the use of iron and steel in the production of more than 300 articles of common civilian use (WPB Release No. 1690).

CONTAINERS (Steel Shipping Drums): Order L-197 affects all steel drums and kits used for shipping printing inks, but excludes those used for aniline or spirit inks and rotogravure inks. Effective September 14, 1942, the purchase of new or second-hand drums and kits for use in shipping printing inks was prohibited. In order that drums and kits now in the hands of ink manufacturers may be used over and over, a deposit charge may be made to insure the return of these items, thereby keeping title in the hands of the packer.

COMMITTEES, Industry Advisory Committees of the Printing and Publishing Branch have been announced.

Book Publishing and Manufacturing Industry Advisory Committee: E. W. Palmer, Deputy Chief of the Printing and Publishing Branch, is the Government Presiding Officer. Members of the Committee are: J. Arthur Bousquet, The H. R. Huntting Co., Springfield, Mass.; George P. Brett, Jr., The Macmillan Co., New York, N. Y.; Theodore C. Briggs, Lawyers Co-Operative Publishing Co., Rochester, N. Y.; Donald C. Brock, Brock & Rankin, Chicago, Ill.; Burr L. Chase, Silver-Burdett Co., New York; C. M. Dubs, W. B. Conkey Co., Hammond, Ind.; Curtis McGraw, McGraw-Hill Book Co., Inc., New York, N. Y.; Alfred P. Jenkins, L. H. Jenkins, Inc., Richmond, Va.; Malcolm Johnson, Doubleday, Doran and Co., New York, N. Y.; Chas. F. Kindt, John C. Winston Co., Philadelphia, Pa.; Richmond, Mayo-Smith, The Plimpton Press, Norwood, Mass.; Robert L. McMichael, Jr., Turner E. Smith & Co., Atlanta, Ga.; John O'Connor, Quarrie Co., Chicago, Ill.; A. Hammer Reiser, Deseret Book Co., Salt Lake City, Utah; and M. M. Wilkerson, Louisiana State University Press, Baton Rouge, Louisiana.

Magazine and Periodical Industry Advisory Committee: E. W. Palmer, Deputy Chief of the Printing and Publishing Branch, is the Government Presiding Officer. Members of the Committee are: Fred O. Bohen, Meredith Publishing Co., Des Moines, Iowa; Clayton H. Ernst, Outdoor Publicators, Inc., Boston, Mass.; A. L. Grammer, Street & Smith Publications, Inc., New York, N. Y.; D. C. Hudson, Progressive Farmer-Ruralist Co., Birmingham, Ala.; Lawrence W. Lane, Lane Publishing Co., San Francisco, Calif.; James H. McGraw, Jr., McGraw-Hill Publishing Co., New York, N. Y.; Marvin Pierce, McCall Corporation, New York, N. Y.; Dr. Daniel A. Poling, Christian Herald Association, New York, N. Y.; H. E. Radcliffe, Nature Magazine, Washington, D. C.; Lewis W. Trayser, The Curtis Publishing Co., Philadelphia, Pa.; N. L. Wallace, Time, Inc., Chicago, Ill.

E. J. Vohs, A.N.P.A. Traffic Manager, has been appointed a member of the Printing and Publishing Industry Transportation Advisory Committee of WPB, succeeding Robert A. Cooke who is now in the Army.

COPPER SCRAP: Electrotypers and other users of copper scrap desiring to obtain authorization under Order M-9-b:

1. To acquire copper scrap by purchase, *file Form PD-59.*
2. To process copper scrap generated in own plant, *write letter requesting authorization.*
3. To process by toll agreement, *write letter requesting authorization.*

Each request should be filed with the War Production Board, Copper Branch, Washington, D. C., Ref: M-9-b.

COPPER CHEMICALS: Order M-277 provides complete allocation control over copper chemicals, including copper sulphate, carbonate, chloride, oxide, nitrate, and cyanide. This order, effective October 1, 1942, aims to conserve copper scrap from which these chemicals used in electrotyping and in printing ink are made. Deliveries of up to 450 pounds of copper sulphate or 25 pounds of other chemicals in any one month may be made by certification from the purchaser to his supplier. The standard chemical forms, PD-600 and PD-601, must be used by those seeking allocation of larger quantities. (WPB Release T-851.)

GLYCERINE: Procedure for glycerine users and producers to file reports and requests for allocations with WPB was changed by Amendment No. 1 to General Preference Order M-58. This will affect manufacturers of printers' rollers and bookbinders' glue in that all applications must be covered by Form PD-362, and by the one-time use-Survey, PD-361.

INVENTORY LIMITATION: Retailers and wholesalers are again informed that they should avoid making

(Continued on Page 38)

Use your old printing machinery to help make tons of armament for victory . . . under the

FOR FULL DETAILS, WRITE
MILLER PRINTING MACHINERY CO.
PITTSBURGH, PA.

New GROUPS

New STANDARDS

● Newspapers are being read carefully, prayerfully by groups of people who have given them scant attention in the past . . . people who read word by word, who comprehend pictures more readily than print . . . yet to whom shreds of hope from distant lands are prized acquisitions . . . Wise newspaper organizations are helping these new readers with maximum effort for clarity in print and picture — the kind of production often achieved with the aid of Certified Mats.

Certified field men are available for consultation on any dry mat questions.

CERTIFIED DRY MAT CORPORATION
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Certified DRY MATS

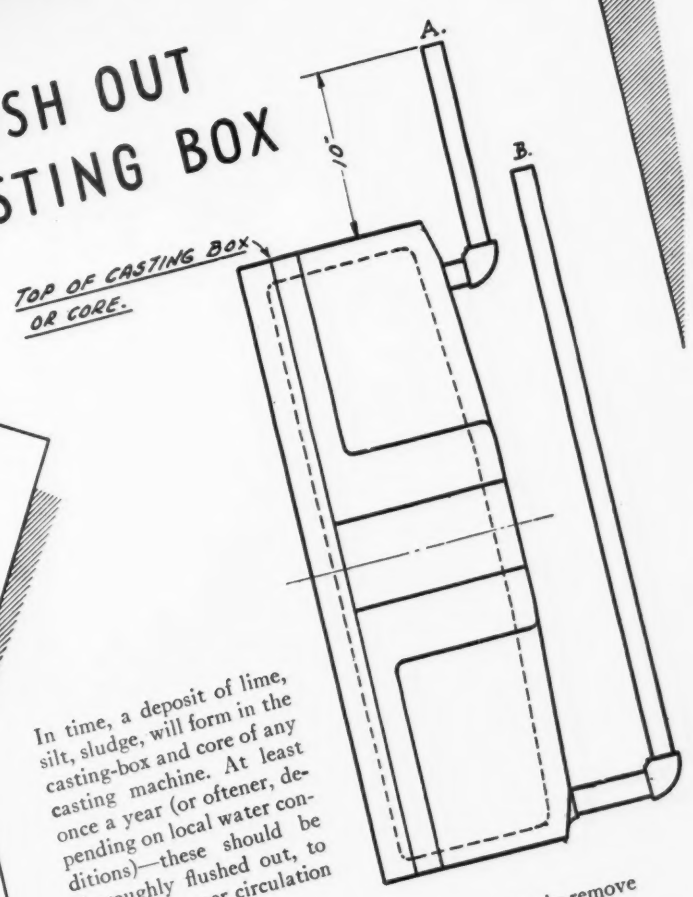
Wood
NEWSPAPER MACHINERY

Autoplate Maintenance Suggestions

IF you have WOOD Autoplates, you have stereo equipment that was designed from the start to cast true, even, cool plates—at high speed—for many trouble-free years.

But present conditions (when existing machines MUST continue to operate for the duration) put extra emphasis on *maintaining peak performance.* The suggestions on this page, carried out regularly, will help to do so. If you need more information, consult the Engineering Department at Plainfield, New Jersey. Wood Newspaper Machinery Corporation. New York Office: 501 Fifth Avenue.

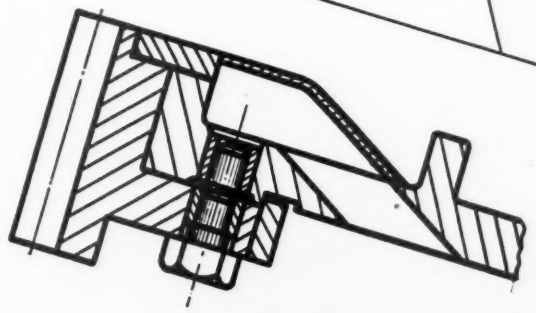
FLUSH OUT CASTING BOX



In time, a deposit of lime, silt, sludge, will form in the casting-box and core of any casting machine. At least once a year (or oftener, depending on local water conditions)—these should be thoroughly flushed out, to maintain proper circulation and cooling.

There is no need to remove the casting box. Simply remove the inlet and outlet water supply lines. Install pipe nipples and elbows, as shown here. Be sure pipe B is slightly *higher* than top of casting box. Then pour any standard brand of boiler compound into pipe A, until it overflows from pipe B. Let solution remain for 6 to 8 hours. Then drain, and flush casting-box thoroughly with fresh water. Core of the Pony Autoplate can be similarly treated.

RENEW SHEAR PINS



To avoid unexpected, time-consuming breakage in the midst of editions, it is recommended practice to renew shear pins at intervals of every 5000 to 6000 plates.

More suggestions for maintenance will follow periodically.

Champion, too, sticks to its KNITTING

This entire organization is dedicated to every service that will help win the war. In this emergency Champion sticks to its highly essential task of producing vitally important paper products in the quantity and form that best serve Government, fighting forces, and war industries. Included are pulp for explosives, paper for shell and munition wrap, food containers, army maps and blackouts, and paper substitutes for certain critical materials. Champion is proud of an ever-growing share in the war effort.

Scrap your Scrap

★

THE CHAMPION PAPER AND FIBRE CO., Hamilton, Ohio

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TECHNICAL BOOKS

- **STANDARD BOOK ON ESTIMATING for PRINTERS —By Fred W. Hoch.** Revised 1941 edition. This book is a primer for students and a reference for printers and estimators. Every printing plant should have a copy. Author explains all operations in commercial printing plant and shows production time allowance for each in hours and decimal hours. Size, 6 in. by 9¼ in., 268 pages, $3.75 per copy, cash with order.
- **PRINTING INKS** — Their Chemistry and Technology **—By Carleton Ellis.** Bound in cloth, 6 in. by 9½ in., 560 pages, well illustrated. For printing executives, pressmen, photo-engravers, platemakers, ink manufacturers, chemists, paper-makers. Author stays close to printing plant. The solving of new production problems brought about by technological improvements, both in equipment and inks, created the urgent need for this book. Price $7, cash with order.
- **THE PRACTICE OF PRESSWORK — By Craig R. Spicher.** We offer copies to our readers, at the special price of $4.00 per copy, cash with order. No printer should be without a copy (9000 copies printed).
- **LITHOGRAPHER'S MANUAL—Compiled by Walter E. Soderstrom.** Second revised edition. Technical information from copy to finished job. Nationally known technical men contributed the bulk of practical camera, platemaking and presswork information. Size 8½ in. by 11¼ in. Bound in red cloth, gold stamped. Many of the 368 pages are illustrated. Price $5 per copy, cash with order.
- **PHOTOGRAVURE—By H. Mills Cartwright.** Covers all of photogravure's basic principles in concise and readable language. Rotogravure receives minor discussion but this is generally considered best textbook on photogravure process. Contains 202 pages, 34 illustrations, maroon cloth, size 6¼ in. by 9¼ in., $3.50 per copy, cash with order.
- **MANUAL OF STEREOTYPING — By Joseph Goggin.** This 256-page book conveys technical information and manipulating procedure. Written by a practical stereotyper. Price $5.00, cash with order.
- **PRESSROOM PROBLEMS AND ANSWERS — By Fred W. Hoch.** Might be considered a miniature encyclopedia since it contains answers to 334 pressroom problems which have been answered by Mr. Hoch. Written in language of journeyman pressman. Pressmen, production men, paper and ink manufacturers, electrotypers and photo-engravers will find this book of high utility when pressroom problems arise in which tendency is to lay blame on furnished materials used in pressroom production. Size, 6 in. by 9½ in., 258 pages, gold stamped blue cloth. Price, $3 per copy, cash with order.
- **HOW TO ADJUST WORK-UPS — By Wm. H. Lichter and Geo. F. Smalley.** Booklet consists of 24 pages in which are analyzed and remedies are given for prevention and/or elimination of work-ups. Material written as result of actual plant experience. Size, 5¼ in. by 7¼ in. Price, $1 per copy, cash with order.
- **HANDBOOK FOR PRESSMEN — By Fred W. Hoch.** Book written by authority on all phases of flat-bed letterpress production for the practical pressman. Contains 248 pages, 26 illustrations and 24 charts, $3 per copy, cash with order.

• Send All Orders With Remittance to

PRINTING EQUIPMENT Engineer

1276 W. Third Street
Cleveland, Ohio

Printing Equipment Engineer

Leading Articles, November 1942

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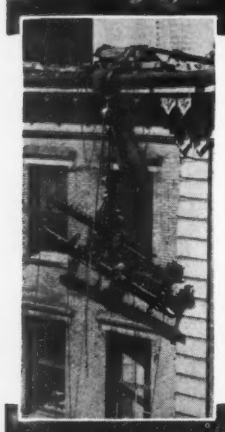
PRINTING EQUIPMENT Engineer, a monthly publication, Volume 65, No. 2. Published at 1276 West Third St., Cleveland, Ohio, November, 1942. • MacD. Sinclair, Editor. Adam Henri Reiser, Associate Editor. John E. Cobb and J. Homer Winkler, Contributing Editors. • Don Will, Publisher. Western Representative, E. P. Bloomster, 232 East Erie St., Chicago, Ill., phone SUperior 2444. Copyright 1942 by The Willsea Pub. Co. • Subscription price per year, $3.50 in advance in U. S. A. Single copy current issues, 35c. Feature issues, $1.00. December Equipment and Supplies Catalog Issue, $1.00. Subscriptions in foreign countries, $4.50 in advance, U. S. currency. • Printed in U. S. A.

MEMBER CONTROLLED CCA CIRCULATION AUDIT

Co-operation does it!

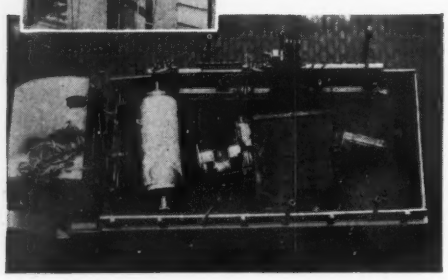
18 TONS of printing presses awaited scrapping on the wooden eighth floor of a New York building. The scrap was vitally needed but the pounding of sledge hammers was not permissible and the cost of dismantling and rigging the old presses "out the window" seemed excessive — *at first!*

The printer called the branch office of the Miller Company. Then, a rigger and a scrap dealer were invited in. All went into a huddle to find ways and means to beat the obstacles. Everybody contributed something and an agreement satisfactory to all resulted. It wasn't long before the old presses were on their way to the scrap pile as shown below.



All hands showed "V" for Victory as they loosened up the old presses for future active combat duty.

"Keep 'em flying" the riggers cheered, as one of the many parts of the old presses was sailed down into the truck anxiously waiting below.



To Every

PRINTER AND SCRAP COMMITTEE MEMBER

An Invitation

. . . to utilize the War-Time Miller Scrap Allowance Plan in facilitating the scrapping of useless printing machinery — as a spur to industrial scrap collection.

The War-Time Miller Scrap Allowance Plan benefits the national war effort, the printing industry and the individual printer. It has immediate and post-war values. It is constructive and helpful to everyone concerned (excepting the enemy). From coast to coast, printing machinery of all sizes and styles has been scrapped under the Miller Plan.

Should you care to know about, suggest to another, or yourself use the War-Time Miller Scrap Allowance Plan under which three or fourfold the scrap value of old printing machinery may be realized by the owner, simple details of the Miller Plan will be given gladly, on request.

No obligation is incurred. Merely mention your Company or affiliation when inquiring.

Miller Printing Machinery Co.
Pittsburgh, Pa.

miller
WARTIME SCRAP ALLOWANCE PLAN

M-99 Obsolete Plate Order Complied with Cheerfully

Informative notes as to how executives handled the obsolete plate problem — Methods varied according to plant size

NO WPB order has been complied with as enthusiastically as the M-99 Obsolete Plate Order issued recently by WPB to the Graphic Arts Industries. While no definite national figures as to total tonnage of obsolete plates turned in to licensed dealers and the designated depositories are available at the moment, the enthusiasm with which the order was complied with by printers and publishers throughout the country seem to indicate that WPB's first estimates of plate tonnage turned in as the result of the order will be exceeded.

Unofficial first estimates coming out of Washington at the time the order was issued indicated that from 40,000 to 50,000 tons of obsolete printing plates would be delivered to the designated receiving companies. These figures a little later were revised when it was estimated that 100,000 tons would be collected.

On October 29, the Printing and Publishing Branch of WPB had not collected enough information about the total tonnage to enable it to give out a definite figure. It is expected, however, that within 30 days reports will be made to the Printing and Publishing Branch by all persons who have disposed of obsolete plates in compliance with Order M-99.

Letters received by *Printing Equipment Engineer* from various parts of the country indicate without exception that executives are glad the order was issued. The opportunity for making a house-cleaning of old plates on a national basis caught the fancy of all printing executives.

We are printing below the results received from a number of executives. The largest tonnages of old plates, of course, were turned in by book publishers, but if the reports printed below from commercial printers and newspapers are indicative of similar action by comparable firms throughout the country, then there isn't any doubt but what the minimum collection of plates will easily meet the unofficial 100,000 ton preliminary estimate.

How Compliance Was Handled at Western P. & L. Co.

A rather interesting resume of the method for handling compliance with Obsolete Plate Order M-99 in the plant of the Western Printing & Lithographing Co., Racine, Wis., is given below by Vice President and General Superintendent Elmer G. Voight. The firm turned in, at the Racine plant 127,467 lbs. in old plate material alone. Summed up briefly, the effectiveness of the obsolete plate disposal program in this plant is due to education and continual pressure by the Salvage Chairman and his Committee through educational and plant meetings."

Mr. Voight reports that the plant organization which has been established will be retained for continued salvage and conservation operations to capitalize on the momentum which has been gained.

Printing plant executives, without exception, should read Mr. Voight's clear-cut description of the organization created within the Racine plant which largely is responsible for the large tonnage of obsolete plates. It is as follows:

"We have obtained what we feel have been excellent results, through the system which we have established in our plants. In the first place, we appointed a Plant Chairman and a Salvage Committee which immediately undertook to handle this problem. Through the medium of regular foremen's meetings and monthly educational meetings of keymen in our plants, we have been able to place all such problems directly before the personnel concerned to have the chairman and committee present vital information and to hold general discussions on the subject.

"Thus we find that all our key people, including members of the sales and production departments become fully conscious of all the requirements and the necessity for full cooperation in compliance.

"The members of our sales and executive planning staffs were made fully aware of the requirements. Salesmen contacting commercial accounts proceeded to get in touch with their individual accounts, showing them all plates which were in our files and obtaining the required permission from them to dispose of the metal. In cases where it was found necessary, the customer was fully acquainted with the WPB requirements and we had no difficulty in getting permission to kill much of this material.

"In the case of our own book plates, we being publishers as well as printers, all obsolete or old material was carefully reviewed by our editorial and planning staff and much of this material was tabbed to be killed where there was little likelihood of reprints.

"We have always maintained a rather complete filing system for old plates, carefully catalogued and maintained in cabinets for our various commercial accounts. Great quantities of book plates are also stored in separate warehouse buildings and these are carefully marked at the time of filing with the date on which they were last used. Therefore, it was no great problem to quickly determine the actual age and degree of obsolescence of most of this material.

"This regular Plate Department which we maintain for the care and filing of all plate material was charged with the task of proofing and submitting for judgment all plate material in our files and warehouse space. Then, when authority was given to kill, this same department undertook the task of getting out all these obsolete plates. They also did the work of removing the metal from the wood blocks so that all our material turned in was actual metal.

"In an organization as large as our own, one can understand that this has been a task of some proportions but we have found it greatly simplified through the medium of education and continual pressure by the Salvage Chairman and his Committee through educational and plant meetings. We now feel that all our keymen and most of our employees are extremely conscious of the need for conservation and salvage. We have been successful in salvaging approximately 150,000 pounds of vital scrap material, metal and rubber, during recent months at Racine. Individual foremen and workers are making it a point to earmark for salvage any material or equipment which can be marked for disposal. In any cases where higher authority is felt necessary to approve disposal, the matter

Part of the 7050 lbs. of obsolete plates turned up and disposed of in the plant of A. S. Gilman, Inc., Cleveland general commercial printers. Preliminary estimate was 3½ tons of plates. Actual plates turned in was 50 lbs. in excess of that amount by weight.

is referred to the Superintendent for decision.

"The plant chairman appointed by our Company is an executive of the Engraving and Production Departments, fully familiar with the phases of plate work for our various departments and well acquainted with the quantity and type of plates we have had on hand during the past.

"The actual tonnage salvaged thus far at Racine plant, in old plate material alone is 127,467 pounds, made up as follows:

Electrotypes	91,000 lbs.
Copper	3,953 lbs.
Photo-Engraving Zinc	18,796 lbs.
Offset Zinc	13,718 lbs.

"This is a continuing operation in our plants and we are carrying on additional salvage of other plates and material which will add substantially to this total."

Order Was a Joy To Printers

Among the many other printing and publishing houses who consider Obsolete Plate Order M-99 a blessing, is Baird-Ward Printing Co., Inc., Nashville, Tenn. This firm's largest contracts are for printing over a million telephone directories annually and the book and periodical printing for the Sunday School Board of the Southern Baptist Convention. Superintendent W. E. Vinson stated: "The cut problem had worried us no little, both with respect to space required for storage as well as the worry of locating cuts. The order certainly was a joy to printers—that is, with us at least.

"We turned in about 8 tons, not including the cuts and plates returned to our customers. We kept schedule as specified in the WPB order. The disposal work was divided among our salesmen, each one of whom contacted his customers. The man in charge of plate storage did a swell job. The work of clearing obsolete plates was completed and all plates were out of our plant by October 1."

4.6240 Tons

Production Manager John W. Park told *Printing Equipment Engineer* that the Chicago *Tribune* disposed of the following tonnage of obsolete plates in connection with WPB's Obsolete Plate Order M-99:

Electros	1.8825 tons
Zinc	2.032 tons
Copper	.7095 tons
Total	4.6240 tons

"These amounts," said Mr. Park, "are relatively small because of our established practice of going through our used plates at regular six month intervals and disposing of all plates that have either not been used during that period or the ones for which there definitely is no further use. A large portion of the above tonnage consisted of plates used for *Tribune* promotion that had been held for a longer period.

"Order M-99 did not, therefore, cause such a large amount of extra work at the *Tribune*. Each department manager having to do with the use or storage of plates —advertising, editorial or promotion— was requested to make a check in his department and segregate all plates that came within the obsolete classification. Only a very few advertisers' plates were involved but a letter was written to each advertiser in order to obtain instructions for disposing of the ones we had.

"Later, all obsolete plates were sent to a central point in our stock room where they were sorted, weighed and turned over to a licensed dealer. Disposal of all obsolete plates was under the direction of the *Tribune's* Purchasing Agent, C. B. James."

Firm's Preliminary Estimate Fairly Accurate

An unique method for figuring the anticipated turn-in of obsolete plates was that employed by Manager Harold Thompson of A. S. Gilman, Inc., Cleveland commercial printers. Mr. Thompson used the unofficial 100,000 ton estimate given out in Washington as the basis from which to figure the amount of obsolete plates which would be collected in the Gilman plant in compliance with Obsolete Plate Order M-99. Cleveland printers usually produce 1/10 of 1% or $10,000,000 of the total national printing volume. The plates to be turned in in the Cleveland area would amount to 1/10 of 1% of the local printing volume, or 1000 tons. A. S. Gilman, Inc., produces 3½% of the annual printing volume in the Cleveland area; accordingly, 3½% of the 1000 tons would be 3½ tons. Latest tabulation by Superintendent Ed Samuel who handled the collection of obsolete plates in the production department of the Gilman plant was 7050 lbs., divided as follows:

Electros	5056 lbs.
Halftones	1444 lbs.
Zinc	50 lbs.
Copper off block	610 lbs.
	7050 lbs.

No New Problems Brought Up By M-99 Order

Assistant Director of Production Glen D. Boylan of Meredith Publishing Company, Des Moines, Ia., publishers of *Successful Farming* and *Better Homes and Gardens*, stated that his company disposed of approximately 5000 lbs. of plates and 6000 lbs. of type metal as a result of compliance with Obsolete Plate Order M-99.

"For several years," he said, "we have been very short of space in our plant and have had plate scrapping requirements almost as rigid as the requirements of M-99. On that account, the task of checking over our plates was not as involved as it would have been otherwise.

"It has been our standard procedure for a number of years to return four-color engravings to the advertiser immediately after they have been used, and to hold other engravings for a period of only one year after they have been used. Consequently, the order did not bring up any new problems.

"Checking compliance with Obsolete Plate Order M-99 was handled in our plant as follows: In order to assure compliance with the order, all department heads affected by the order were notified of the provisions contained in the order. The head of the plate storage section was assigned the task of making a detailed check of every engraving on hand and the composing room superintendent checked all standing forms also. In practically all cases our customers are the heads of other departments within our organization. An OK was secured from the customer department on each engraving destroyed. Assignment of responsibility for certification of compliance with M-99 was made to those parties who regularly order the plates covered by the order.

Everyone "Anxious to Cooperate"

Manager Ben Granger of the St. Petersburg (Fla.) Printing Co., Inc., stated that when Obsolete Plate Order M-99 was received, his company notified all its customers of the order, asking them for the privilege of disposing of their obsolete plates. Everyone seemed to be anxious to cooperate, and as a result, all obsolete plates were disposed of. We turned in approximately 1500 lbs.

"We maintain a complete plate filing system in which each customer's plates are filed separately. Therefore, very little trouble was required to get out the obsolete plates, the work being done by a man who has charge of the cut file.

"We were glad to discard these old plates which gives us much needed filing space for current plates. Up until the time of "house-cleaning" our files were crowded. When this order was issued, we thought we had quite a job on our hands. Considering our method of filing cuts in conjunction with the cooperation of our customers, the work of clearing the files was not difficult after all."

Cleveland Printers Co-operative

In discussing the general compliance of the printing and publishing fraternity with Obsolete Plate Order M-99 in the Cleveland area, Regional Manager E. T. Engle of the Cleveland Typothetae Association told *Printing Equipment Engineer* that everybody was cooperative and seemed anxious to complete the job of ridding their plants of useless and idle printing plates.

Mr. Engle cited two instances which demonstrated the responsibility felt by individual persons. One of these was principal of a school containing a printing department. The woman in question called Mr. Engle's office and stated she had half a dozen copper halftones to contribute and wanted to know if the cuts would be picked up by someone. When advised as to where they should be delivered, she was appreciative and promised to see that they were taken to the proper place.

The manager of a Cleveland printing concern called Mr. Engle to discuss the obsolete plate order. He stated he felt he couldn't do anything further to comply inasmuch as he had given orders to clean out all obsolete plates six months ago. Mr. Engle prevailed upon him to recheck his plant for useless plates. In about a week Mr. Manager called Mr. Engle to tell him his plant had been rechecked

for obsolete plates and as a result one ton had been taken away by an authorized dealer.

The general expression of opinion among printing executives is that they are glad Order M-99 was issued because it has given them an opportunity to clean house which would not have occurred under any other circumstances.

At first, because of misunderstanding of the provisions of Order M-99, some confusion was caused among printers when it was found that the three firms originally mentioned in the August 5 copy of the WPB order as disposal agencies, wouldn't accept less than carload lots of old electros. Firms having plates to dispose of then turned to electrotypers authorized by WPB to receive such plates. Apparently, some of the electrotypers soon had received more old plates than could be accepted. After investigation, printers were referred by Mr. Engle to three authorized Cleveland firms and several metal supply companies who would accept medium and small lots of obsolete plates, and everybody was happy.

"Job Was About Completed" As Order Became Effective

In contrast to the experiences of other executives quoted in this article, Production Manager Leon A. Link reported that the Cleveland *Plain Dealer* started cleaning out obsolete plates and cuts early in the spring in anticipation of the Obsolete Plate Order which Deputy Chief E. W. Palmer discussed in speeches at that time. Since the spring house-cleaning, a rigid plate disposal schedule has been maintained at the *Plain Dealer* and the job was just about completed shortly after issuance of Order M-99.

23,000 Lbs. of Copper At Curtis Pub. Co.

The handling of the obsolete plate disposal work was under the direction of the manager of the Engraving and Plate Service Div. in the plant of the Curtis Publishing Co., Philadelphia. Approximately 23,000 lbs. of copper were disposed of. Decisions were made by the editorial departments as to what engravings then being held did not have an assured future use. Advertisers' plates always have been returned or scrapped within a year of their last inclusion in the Curtis magazines, unless assured of a future use. For this reason, their contribution to the total weight disposed of was a comparatively minor one. Electrotypes did not figure in because they are disposed of regularly after each issue has been run.

10,687 lbs. Scrap

Production Manager Herbert T. Stanger of The Christian Science Publishing Society, Boston, stated that the task of gathering plates to comply with WPB's Obsolete Plate Order M-99, was delegated to the Production Department. Several assistants under Mr. Stanger's direction completed the work. An inventory was taken of all plates and the list was sent to the manager. The order was followed literally. The editorial department was consulted to find out whether there was any assured use for the plates. On those plates for which there was no assured use, the production department asked permission of the manager's office to junk them.

The electros used on the magazine rotary presses go back to the vendor regularly because there is no occasion for holding them beyond the current issue.

Mr. Stanger reports the following amounts of various metals were disposed of as the result of Obsolete Plate Order M-99:

Zinc	9,853 lbs.
Copper	30 lbs.
Electrotypes	654 lbs.
Aluminum	145 lbs.
Brass	5 lbs.
Total	10,687 lbs.

Organization of Graphic Arts Victory Campaigns Committee's National Advisory Board proceeding — Enthusiasm demonstrated in many parts of country — GAVCC's need right now is receipt of $1-per-man-per-plant pledges to enable work to proceed

CHIEF news concerning the Graphic Arts Victory Campaigns Committee since publication of the letter of approval received by the Committee from Deputy Chief E. W. Palmer of WPB's Printing and Publishing Branch, in the October trade press, is that the Committee membership is in process of being expanded on a national basis by selection of printing executives from Graphic Arts groups in cities throughout the country. The GAVCC program also has the endorsement of the office of War Information. Each elected member to the National Advisory Board will serve as regional chairman and will direct the Committee's activities within his association. Members to the National Advisory Board of GAVCC have already been elected by a number of national associations. Others have signified their intention of appointing their representatives just as quickly as the organizations meet in official session. To illustrate, President Edward N. Mayer, Jr., of the Mail Advertising Service Association has been appointed to the national advisory board of GAVCC.

GAVCC Objectives

To refresh your memory, the four Objectives of GAVCC are being printed again in this month's issue of *Printing EquipmentsEngineer*. These are:

(1) To coordinate all printing efforts to aid the Government in winning the war.

(2) To act as liaison between Government and industry by interpreting the objectives of various Government agencies (as represented by the announced publicity campaigns of the Office of War Information) via the printed message.

(3) To show what constitutes essential advertising, by using the Treasury Department's ruling as to types of advertising expense deductible from income taxes.

(4) To channel all future printing toward winning the war. This can be accomplished by directing all planning and creating along these lines.

Financing the Project

To carry on the work of organizing the Graphic Arts Victory Campaigns Committee into a national body and to show printers and lithographers how to help themselves, a definite plan has been outlined which will be available to all those who become associated with the Committee. To put this plan into effect, contributions from national and local trade associations, individual printers and lithographers, and the manufacturer and supplier groups are solicited and are now being received. The total budget for the six - month campaign amounts to $100,000.

To raise this needed amount, the Committee has adopted the $1-per-man-per-plant idea for printing and lithographing

It is urged by the Committee that all those intending to contribute to the six-month campaign on the basis of $1-per-man-per-plant, cooperate now by sending their pledge cards to Treasurer Harry A. Porter, Harris-Seybold-Potter Co., 4510 E. 71st St., Cleveland, O. Your pledge at the $1-per-man-per-plant rate will enable the Committee to set the campaign in motion.

plants. This plan seems to meet the universal approval of printers and lithographers. Trade associations, some of the larger groups and individual companies are expected to bear a heavier portion of the financing burden.

A Concrete Illustration

A concrete illustration as to how GAVCC will function to help printers and lithographers boost Government projects is described here: As soon as sufficient funds have accumulated to permit issuing the first instruction folder, it will be printed for use as trade paper inserts. All subsequent printed material to be issued by GAVCC will have a similar format to enable printing and lithographic salesmen save the folders so that they can assemble a manual of operation in a wartime market.

For instance, in the initial folder will be presented all the facts which it is necessary for an advertising man and his printing and lithographic salesmen to know to cooperate effectively and officially with the National Nutrition Campaign; all the sources of information for special data; all government, state and food industry sources of aid; all the pamphlets and books available and their publishers; examples of successful as well as government-approved methods for tagging advertising appeals to the "U. S. Needs US Strong" theme; and sales suggestions for printing and lithographic salesmen.

It is planned subsequently to prepare and issue similar material for all the 58 Government Victory Projects and others as they arise.

The Prospectus

The Temporary Committee of the Graphic Arts Victory Campaigns Committee has been distributing to interested representatives of trade association groups throughout the country copies of a 12 page prospectus entitled *How Printing and Lithography Can Help Win the War*. In this booklet, printers and lithographers are shown how they can coordinate all printing efforts to aid the Government in winning the war; the 31 Government Victory Projects to which advertisers may "tag" their promotion; the kinds of advertising which are considered essential by the U. S. Treasury Department, the expense of which is deductible from income taxes, and a list of recommended advertising appeals and the types of printing and lithography which are required.

Initial Cooperative Promotion

One of those who has been actively distributing the prospectus is Field Secretary A. P. Schloegel who mailed 450 copies to the International Association of Electrotypers and Stereotypers membership. Edward N. Mayer, jr., president of Mail Advertising Service Association, has been supplied with 500 copies of the prospectus at his request for distribution among the association's membership.

Through its president, Thos. R. Jones of American Type Founders, the National Printing Equipment Association has expressed great interest in the GAVCC. Currently, the Association is circulating the prospectus *How Printing and Lithography Can Help Win the War*, to its membership. A meeting is scheduled of all members preparatory to pledging a sum from the Association's treasury.

Copies of the prospectus for distribution to group memberships may be obtained from any member of the Temporary Committee. The Committee, however, will be glad to mail single copies to individuals asking for it, as well as the quantity amounts requested by association officials.

An Example of Individual Enthusiasm

Vice President Henry Kinyon of E. W. Stephens Co., printers in Columbia, Mo., became enthusiastic about the aims and purposes of GAVCC after reading articles about the plan in the trade press. Immediately, he began to think of rendering a service to his advertiser-customers via the 58 Government Victory projects. He wrote the Temporary Committee as follows:

"Thank you for the two extra copies of the prospectus. Since we already had a copy of the prospectus and have read a good deal about the Committee's work in various trade publications, we are taking the liberty of passing these two extra copies, with the pledge cards, to a couple of other printers in Columbia.

"We sent a small check to Treasurer H. A. Porter a few days ago, wishing sincerely that it might have been two or three times as much.

"We are now preparing a small mailing piece, suggesting to our customers that in their advertising and printing they stress one or more of the Victory campaigns. We have used the War Bond and Stamp motif in quite a lot of our own work and expect to broaden out on the Victory Campaign idea as opportunity affords.

"You may be sure that any time a suggestion occurs to me which would seem to be feasible, I will be very happy to pass it along. In the meantime, we would certainly like to receive all the suggestions and help which the Committee will be able to give us."

Immediate Need is Talent Pool

The Temporary Committee has placed particular emphasis on the need for the pooling of talent by artists, layout men, typographers and copy writers to assist in the creation of essential educational printing and lithography. Those who wish to volunteer their services are requested to write Herbert Kaufman, Program Chairman, c/o General Printing Ink Corporation, 100 Sixth Ave., New York, N. Y.

To demonstrate that volunteer talent for the pool is forthcoming, Jim Shanahan, Art Center, 32 W. Randolph St., Chicago, wrote the temporary committee as follows: "Please count on Art Center, Chicago, its membership, and on myself personally, to help you put over the Graphic Arts Victory Campaign. If possible, see to it that Chicago is well represented on your Advisory Board as it will help a great deal to line up good talent here."

Group Printing of Matched Stationery Has Many Advantages

IN a well offset printed booklet displaying matched stationery in black and color on a single sheet, including letterheads, checks, invoices, purchase orders, statements, second sheets (printed), and envelopes, the Gilbert Paper Co., Menasha, Wis. stresses the advantages of uniformity of color, economy of production, and the importance of having the "name trade mark" with the same appearance on every piece of written product sent out. Printers and advertisers will welcome this timely presentation at a time when economy without loss of effectiveness in presentation is the order of the day.

The 17x22 sheet carried folded in the booklet is printed in colors with one form each of letterhead, statement, invoice and envelope. The 22x34 sheet displays two letterheads, a printed second sheet, (all three 8½x11), an invoice, statement, check, business card (to be folded twice to regular calling card size), purchase order and two envelope blanks. The cutting and trimming lines are included, so that separating the various units on the paper cutting machine is easy.

The printer will realize the advantages of having the colors exactly the same on all units possible by this layout and also the presswork saved by the group or gang printing.

Accompanying this article is a reproduction of the No. 2 (22x34) form.

While this display is printed by offset, the same advantages accrue if the reproduction is by letterpress.

Because of the wealth of suggestion in the two layouts every printer and preparer of copy should have one of these booklets on his desk.

Public Printer's Mother Dies

Mrs. Mary C. Giegengack, mother of Hon. A. E. Giegengack, Public Printer of the United States, died in Brooklyn, N. Y., on October 14.

Mrs. Giegengack was born in London, England, on January 6, 1865. Mrs. Giegengack learned the printers' trade and later, when the family had moved from London to New York, worked as a compositor on the old *Harper's Bazaar*.

Funeral services were held from the parlors of Fred Herbst Sons, Brooklyn, and at the Church of St. Bernadette, Brooklyn.

LETTERHEAD

GENERAL MACHINE WORK AND BUILDERS OF SPECIAL MACHINERY

AMERICAN MACHINE COMPANY INCORPORATED

PLANT AND GENERAL OFFICES

LETTERHEAD

GENERAL MACHINE WORK AND BUILDERS OF SPECIAL MACHINERY

AMERICAN MACHINE COMPANY INCORPORATED

PLANT AND GENERAL OFFICES

INVOICE

STATEMENT

Watertown, N. Y. _____ 19__ No. 499

AMERICAN MACHINE COMPANY INCORPORATED

Pay to the order of _____ EXACTLY _____ $ _____

CHECK

NO CENTS EXACTLY

DOLLARS

AMERICAN MACHINE COMPANY

To the NATIONAL MANUFACTURERS BANK of Watertown, N. Y.

BUSINESS CARD

to be folded twice to
each calling card size

PURCHASE ORDER

GENERAL MACHINE WORK AND BUILDERS OF SPECIAL MACHINERY

AMERICAN MACHINE COMPANY INCORPORATED

PLANT AND GENERAL OFFICES

PURCHASE ORDER

AMERICAN MACHINE COMPANY

Please enter our order for the following:

Charge to Job No.

TO

VIA

Our Purchase Order NO.

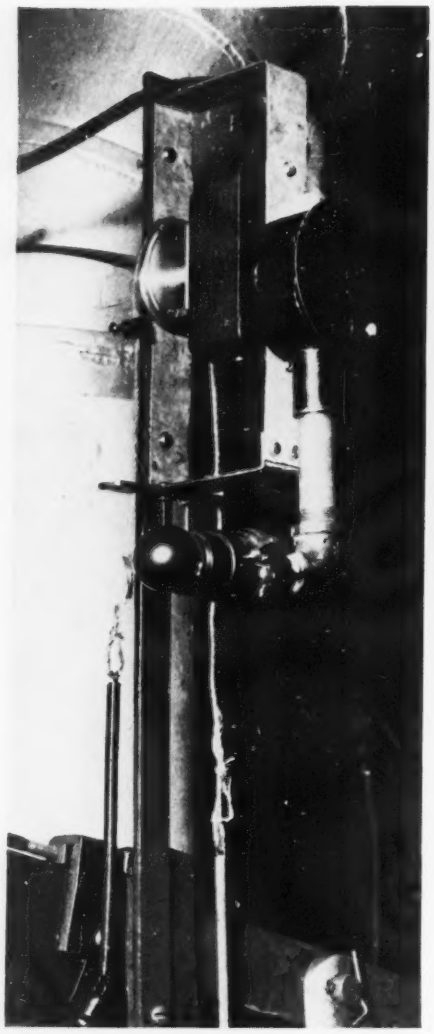
SECOND SHEET

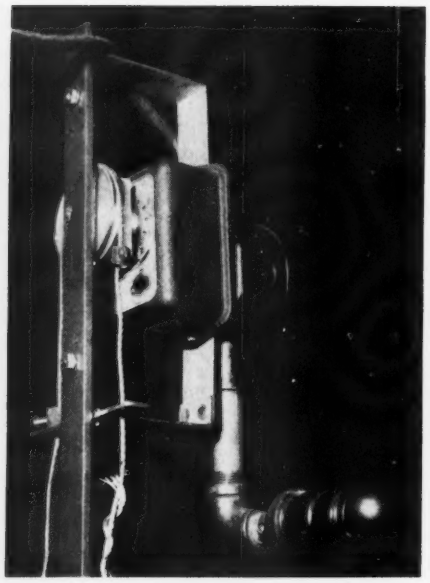
AMERICAN MACHINE COMPANY INCORPORATED

ENVELOPE

AMERICAN MACHINE COMPANY INCORPORATED

ENVELOPE





This plate solidification timer is used to prevent plate spread on the plate-casting equipment in the stereotype department of the Long Island (N.Y.) **Star-Journal,** by indicating the proper plate solidification time interval. When the operator depresses the metal pot pump lever to cast a plate, the downstroke of the lever through the wire cable connection and the 3 in. grooved steel pulley, rotates the Paragon 60 sec. Interval Timer. When 22 sec. have expired after casting the plate, the timer turns on electricity for illuminating the red lamp which warns the operator that sufficient time has expired for the plate to solidify properly and it may now be removed from the casting box.

Gadgets Devised in Plant of Long Island (N.Y.) Star-Journal, Improve Stereotype Plate Production

By C. M. (Bert) TRUEX*

*Stereotype Superintendent

IN the stereotype department of the Long Island (N.Y.) *Star-Journal*, we have developed several devices which we feel are great aids to more accurate plate production. In each case the devices eliminate the human element in judging when certain mechanical operations in making stereotype plates have been completed. Considering the particular types of equipment with which we work, we are able to turn out better plates by reason of the addition of these gadgets. We are passing them on with the thought in mind that other stereotype executives having similar difficulties may be able to remedy them. One of the devices functions to indicate to the operator of the curved plate casting box when a plate is ready to be removed from the box after the molten metal has been poured into the mold. This device, with suitable modifications, could be applied to any pump-operated curved plate casting box. The second device is applied to a Speed Mat Scorcher so that when a mat has been pre-shrunk the required amount before placing in an early model Sta-Hi mat former, a light will be illuminated and a bell will start ringing to warn the operator that the mat has been pre-shrunk the required amount crosswise. The third device is a simple arrangement for lubricating automatically the saws or formed cutters which are used in a Hoe plate-finishing machine for turning the beveled edges on the ends of stereotype plates. These will be described in the order in which they have been mentioned above. The devices were developed with the collaboration of our plant maintenance engineer, E. V. Dabroski.

Plate Solidification Timer

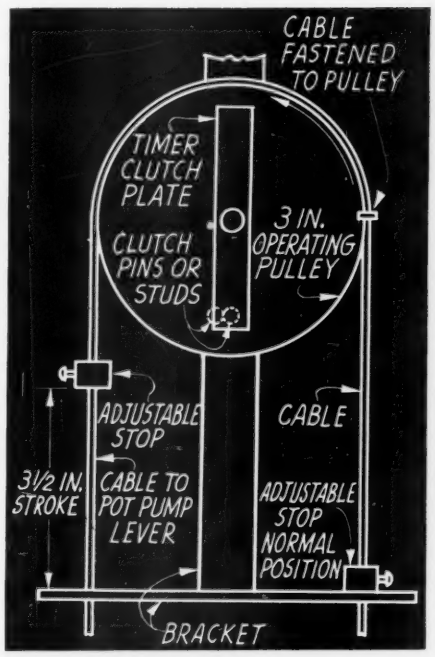
We have applied to our Hoe stereotype metal pot with hand casting box and plate finishing machine a device for indicating automatically by means of a red lamp, the proper interval between the time the molten metal is poured into the casting box and the instant when proper solidification of the plate has taken place. As is well known, if a plate is removed too soon after pouring, spreading of the plate is likely to occur and the plate must be recast. On the other hand, valuable time is lost if a plate is left too long in the casting box after solidification. This device, as will be seen, eliminates errors in judgment as to the proper plate solidification time upon the part of the casting box operator.

When a plate has been removed from the casting box before proper solidification, it has a tendency to spread. In fact, the hotter the plate is upon removal, the greater is the spread. There is very little clearance between the plate and the arch of the shaver. Hence, the free edges of the plate will scrape against the arch, causing what we call "skins". This scraping of the plate against the arch necessitated entirely too many replates. It seemed to me that the remedy for this trouble would be to apply some kind of a timing device to the casting box to insure that a plate would not be lifted from the box before proper solidification has taken place.

The stereotype plate solidification timer is arranged so that a red signal light remains illuminated as long as the timer is in operation during the 22 sec. plate cooling period.

Most of the parts used in making up the solidification timer were assembled from materials salvaged in our plant. As will be seen from the illustrations, a bracket for supporting the component parts is mounted above the pump lever guide on the metal pot. Construction of the bracket is simple and for that reason we will not go into complete detail.

The timing device employed is a Paragon 60 sec. Electric Interval Timer, Paragon Electric Co., West Erie and Hickock Sts., Chicago, Ill. (factory at Manitowac, Wis.) which is mounted about 20 in. above the pump handle at one inside vertical surface of a bracket. To the rotatable shaft in the center of the timer dial is connected a 3 in. grooved steel pulley. Between the pulley and the timer dial is interposed a simple clutch arrangement (see diagram) to permit rotation of the grooved steel pulley and the setting of the timer for 22 sec. when the pot pump lever is depressed, but when the pump lever handle is raised to its normal position the clutch permits rotation of the steel pulley but does not affect the setting of the timer. The timer operating mechanism is connected to the pot pump lever by means of a length of steel wire cable. The other end of the cable is fastened to a fixed steel rod screwed into the pump lever bracket itself. To provide a resilient pull and a cushion stop limit for the setting operation of the timer through rotation of the grooved steel pulley, a ¼ in. diam. close-wound steel spring, 8 in. long, is interposed between the cable and the fastening on the pump lever. The rotation stroke of the grooved pulley is about 3½ in. The downstroke of the pump lever at the point where the cable and spring are connected to it is approximately 10 in.



Diagramatic representation (not to scale) of the Paragon Interval Timer operating device used in the plant of the Long Island (N.Y.) **Star-Journal,** and described by Mr. Truex in the accompanying article. When the pot pump lever is depressed to cast a plate, the 3 in. operating pulley, through the wire cable, rotates one-half turn, which is the maximum rotation of the shaft permitted by the 30 sec. timer used in this installation. By moving the adjustable stops on the wire cable, up or down, timing intervals ranging from 3 sec. to 30 sec. may be obtained. A pin or stud in one side of the pulley engages a similar pin in a plate mounted upon the timer shaft, likewise rotating the timer shaft one-half turn. Now, by moving the adjustable stops to new positions along the cable, the stroke of the pulley may be determined so the timer shaft will only rotate until the timer is set for a timing interval of 22 sec. as employed in the **Star-Journal** plant.

The spring takes up the difference in length of stroke.

In order to provide exact rotation of the timer, two adjustable steel stop blocks are fastened to the wire cable. One of these limits the setting rotation of the timer dial on the downstroke of the pump lever handle and the other steel block limits the return stroke of the grooved steel pulley so that when the pot pump lever again is depressed it will start rotation of the timer dial shaft at the proper instant. The red signal light remains illuminated as long as the timer is in operation during the 22 sec. plate-cooling period.

Since we have been using the timer, it is evident that we get a much better and more uniform printing plate. I have discovered that as little as 2 sec. more time in cooling the plate prevents the "skinning" of the plate in the shaving machine arch.

Mat Pre-Shrink Limit Device

Before the mat pre-shrink limit device can be explained to you, it should be stated that our mat drying and forming equipment consists of two Speed Mat Roasters and an early-model one-heat Sta-Hi Former. The device about to be described is applied to the Speed Roasters where the mats are pre-shrunk before placing them in the Sta-Hi Former for final baking and forming.

We use Burgess dry mats containing 22% moisture. Our shrinkage requirements are 5/16 in. We tried getting all of this shrinkage in the Sta-Hi. Because of the relatively great amount of shrinkage, the packing would creep. The mats being so soft because of the high moisture content, very close packing is required.

We then tried getting part of the initial shrinkage in a Speed Scorcher before packing the mat. We applied an electrical timer to the Scorcher, but because of the changes in the temperature of the scorcher as it was being used, the shrinkage in the mats varied too much. As will be seen, a fixed time interval did not produce uniform shrinkage in the mats.

It then occurred to me that the way to overcome the shrinkage irregularities would be to devise some kind of device for application to the Speed Scorcher which would indicate to the stereotyper the exact moment when a mat had been shrunk the required amount of ½ in.

The device consists principally of a sliding element which contacts one edge of the mat while in the roaster. As the shrinkage takes place, the sliding element of blade follows the movement of the mat. When sufficient mat shrinkage has taken place, a contact mounted on the sliding blade touches a fixed contact to close an electrical circuit which then illuminates a lamp and starts ringing a bell.

In order to permit free movement of the mat while in the scorcher, metal strips were fastened at either outside edge of the scorcher body to prevent the lid bearing upon the mat itself. Each mat is placed in a fixed stop in the scorcher at the right so that the sliding blade under spring pressure urges the mat against the fixed stop as shrinkage occurs.

The sliding blade works in a slot cut into a metal strip which in turn is supported by an ordinary shelf bracket at the left side of the scorcher.

At the right side of the metal strip is mounted a fixed electrical contact. Mounted on the sliding blade is the complementary electrical contact, as will be seen by referring to the accompanying illustrations. As the mat shrinkage takes place, the blade follows the movement of the mat until the contact on the sliding blade touches the fixed contact, which, as is stated above, closes an electrical circuit to illuminate a lamp and start the warning bell in motion.

In our plant, the mats are trimmed for width as soon as they have been molded and before they are placed in the pre-roaster or scorcher. It has been our experience that the mats distort somewhat but not too much for the Sta-Hi to pull out, as well as controlling the other 5/16 in. final shrinkage. The shrinkage is as accurate as the trimming of the mat permits.

The indicating lamps used are 6 v. capacity. An ordinary doorbell assembly is used. The circuit is wired into 110 v. circuit and is reduced for this purpose by a small transformer.

Automatic Cutter Oiler

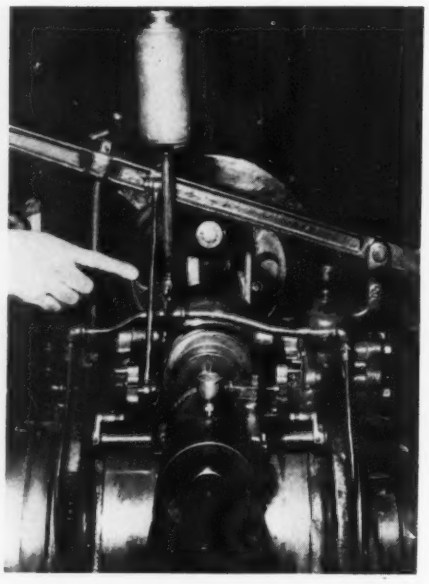
On our Hoe plate-finishing machine, we have provided a means for oiling automatically the two cutters which put the bevel on each side of the plate. The gadget consists of a pint tin can mounted

This illustration shows the stereotype mat pre-shrinkage control device applied to a Speed Scorcher in the plant of the Long Island (N.Y.) **Star-Journal.** Through use of the device, when a mat has been pre-shrunk ½ in., a sliding contact which closes an electrical circuit illuminates a clear lamp and starts ringing a warning bell to indicate to the stereotyper that the mat is ready for removal.

A fixed stop at the right side of the scorcher is used as a guide against which the mat is placed. The metal strips, one of which is visible at the left, hold the scorcher cover from exerting pressure on the mat, so the mat will be free to creep to the right as shrinkage takes place.

Mats used at the **Star-Journal** contain 22% moisture, total shrinkage required is 5/16 in.

The mat is urged against the right-hand stop by the sliding blade under spring pressure. The spring which urges the blade to the right may be seen under the slide bracket at the left. At the right of the shelf is mounted a fixed contact. Another contact is mounted on the sliding blade. When the movable contact touches the fixed contact, the clear lamp is illuminated and the bell starts ringing. Contacts are mounted in wooden blocks. The other lamp (the red one) is automatically illuminated when the blade is withdrawn from its non-working position so that its right end bears against the mat. The lamp is illuminated so long as the mat is in the roaster and acts as a warning to inform the stereotyper that the roaster is busy.



View of Hoe stereotype plate finishing machine bevel cutter automatic oiler. The device consists of a 1 pt. tin can resting on a vertical section of pipe. Oil feed pipes running to cutters are mounted like an inverted U. Finger in picture is pointing to a spring lever water valve. The valve handle or lever is connected to the toggle of the clutch operating lever. When lever is depressed to bevel stereo plates, it automatically operates valve which supplies a small quantity of oil to the cutters.

above the clutch operating lever. Piping extends from the bottom of the can, in inverted U fashion, to each of the cutters. An ordinary spring-lever water valve, as is shown in the illustration, is interposed between the upper and lower vertical section of the feed pipe. Each end of the feed line terminates directly above the cutter so that when lubricating oil is released it drips directly on the cutter edge. A length of wire extends from the water valve lever to the clutch operating lever toggle so that when the lever is depressed a small quantity of oil is released through the valve to drip from each of the pipes on the cutters. Construction of the oiling device is so simple that further explanation will not be made.

The use of this automatic oiling device has lengthened cutter life at least three times between sharpenings, than would be the case where cutters are oiled by hand.

$650 Prizes in War Bonds

In the interest of industrial conservation, and to help speed war production, Metallizing Engineering Co., Inc. is offering a total of $650 in War Bonds for details of maintenance and salvage procedures with the metal spraying process. First Prize is $250, Second Prize $150, Third Prize $100, and three prizes of $50 each. Contest closes December 15. Complete information and entry forms obtainable from Metco News, 21-07 41st Avenue, Long Island City, New York. In a news release, it is stated this contest has been approved by the General Postoffice.

WPB Restrictions Concerning Chemicals

JUST as important as machinery, metals, and paper to continued production of the printing and publishing industry are the various chemicals used. They may be consumed in the manufacture of products or materials needed in printing or be used directly. Usually, they are not required in the volume or equal money value as such items as labor, machinery, etc. However, some of these chemicals are so vital to an industry that it could not produce without an adequate supply and substitution would be most difficult, if possible. Nitric Acid is an example of a key chemical and is absolutely essential to the making of zinc photo-engravings, while sulfuric acid holds the same position for the electrotyping industry.

Regulations, orders, and allocations covering those chemicals used in the printing and publishing industry are therefore of vital interest to those concerned. Recent releases by the Chemicals Branch and the Printing and Publishing Branch of the War Production Board furnish the latest information on this subject. Abstracting such items as affect the principal chemicals used by the many trades of the printing and publishing industry, a summarization of the regulations and orders is as follows:

Copper Chemicals — Under complete allocation control as provided by Order M-277 are copper salts such as the sulfate, carbonate, chloride, oxide, nitrate, and cyanide. Consumers' inventories are reduced and uses are allowed in full. Deliveries of up to 450 pounds of copper sulfate or 25 pounds of other chemicals in any one month may be made by certification from the purchaser to his supplier. PD-600 and PD-601 must be used by those seeking an allocation of greater quantities (WPB release T-851 and T-1061).

Glycerine—Manufacturers of printers' rollers and bookbinders' glue must make applications for glycerine on Form PD-362 and PD-361. Procedure for glycerine users and producers to file reports and requests for allocations with WPB is now covered by General Preference Order M-58.

Nitric Acid—The demand for nitric acid to be used for explosives manufacture is great and is increasing. Photo-engravers will be able to obtain their normal requirements of October, no statement regarding November and supplies is now available. Great is the need for conserving nitric acid.

Petroleum Solvents—All aromatic petroleum solvents, except benzol and toluol, were ordered to come under complete allocation starting October 1, 1942. This allocation control, under Order M-150, will not apply to users requiring 60 gallons or less per month. Allocation applications must be made by the tenth of the month preceding the month for which allocation is requested on Form PD-600. Other solvents available to ink manufacturers are expected to permit the preparation of a satisfactory product for gravure printers.

Benzol is controlled by Order M-137 and can be obtained only on specific authorization.

Toluol as a dilutent for protective coatings, including gravure inks, is prohibited under Order M-34.

Silver Nitrate—Photo-engravers and other manufacturers requiring silver nitrate should file an application (in event they encounter difficulty in obtaining reasonable quantities) on Form PD-1A with the Printing and Publishing Branch. If under PRP, the applications should be made on series PD-25 forms.

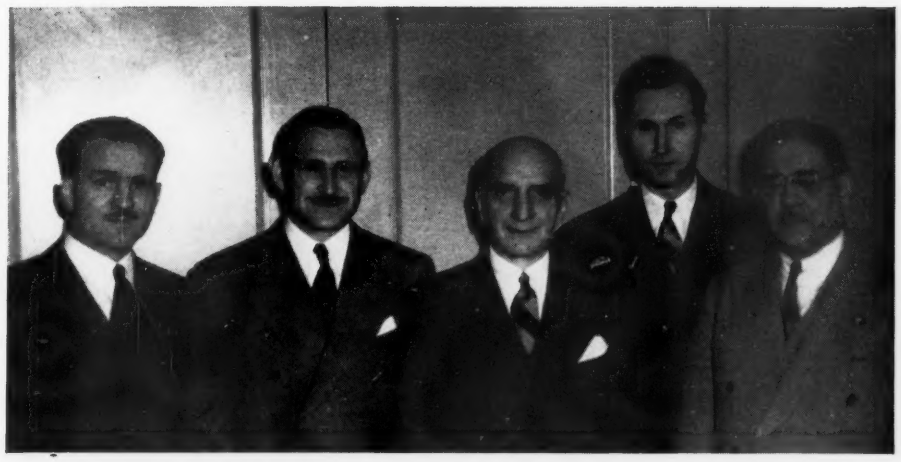
In addition to the above listed chemicals the following lists have been *granted allocations in full* for October, 1942.

Chemical	*Application*
Acid Naphthenic and Naphthenates	Gravure Printing
Anhydrous Ammonia	Films and Photochemicals
	Photo-engraving and Paper
Aqua Ammonia	Paper
Aromatic Petroleum Products	Gravure Printing
Copper Chemicals	Electrotyping
Nitrocellulose	Printing Inks
	Bookbinding
Sperm Oil	Heavy duty motor oil additives
Sodium Nitrate	Nitric acid manufacture (photo-engraving)

Allocations for the month of October, 1942 were denied for the following chemicals:

Benzol	Type Wash and similar uses
Ethyl cellulose	Non-essential cellophane
	Bookbinding
	Textile finishing and printing
Phosphate Plasticizers	
Tricresyl	Adhesives, coatings, synthetic rubber
Triphenyl	Synthetic rubber
Shellac	Aniline Inks
Vinyl Chloride, Polymers and Co-Polymers	Bookbindings

The above listings serve as a guide only. Full information may be had by obtaining a copy of the particular order or release involved from the War Production Board, Division of Information, Room 1501, Social Security Building, Washington, D. C.



At the Greater Cleveland Graphic Arts meeting, October 12 (left to right): J. Homer Winkler, Ace Electrotype Co., and President Harold Hill of Cleveland Typothetae, Cleveland; Deputy Chief E. W. Palmer, Printing and Publishing Branch, WPB; General Chairman M. J. Eck, Cleveland Board of Education; Vice President Harry Porter, Harris-Seybold-Potter Company, Cleveland. The other speaker, Newspaper Specialist Leon A. Link of WPB, arrived too late to appear in this group.

Conservation Curtailment Concentration

Problems in the printing industry become more intensified as WPB analyzes manpower situation — Late speeches by Deputy Chief E. W. Palmer, Printing and Publishing Branch, progressively indicate trends which may become mandatory at any time

EXECUTIVES in the printing industry who have been following the speeches given by Deputy Chief E. W. Palmer of WPB's Printing and Publishing Branch, in various parts of the country, either by being present to hear them or by reading reports in the trade press, have noticed progressive statements indicating further imminence of mandatory conservation, arbitrary curtailment of materials and supplies and the possible concentration, if not actually of printing and publishing plants of the plants of suppliers of a number of the raw and finished materials used by printers and publishers.

Paper Use Curtailment

One of the latest WPB curtailment moves, according to an Associated Press dispatch from Washington, D. C., is the reported 10% cut in the manufacture of paper. In his Cleveland speech on October 12, Mr. Palmer stated that 20,000,000 tons of paper were produced in 1941 by approximately 740 mills in the United States and Canada. He stated a recent WPB analysis showed that this paper tonnage could be produced by 120 mills operating 100% of the time. In his Hershey, (Pa.) address on September 17, he stated: "The incessant drag of the selective service on the virile manpower in the logging camps, plus the urge of the shipyards and munitions plants with their higher wage scales, has made serious inroad upon the manpower available in the woods for turning out timber, lumber and pulpwood. And the end is not yet in sight. He called attention to the fact that the container manufacturers have turned to the use of paper products as a substitute for critical metals which are now forbidden to be used for packaging.

These and other statements related to conservation and curtailment seem to indicate that WPB action is not far away.

On several occasions, Mr. Palmer made the statement in his speeches that the "conversion potential of printing plants is rather low." Now, with indexes in near-recent speeches pointing to the desirable production of essential printing it would seem that the industry should try to anticipate just what "essential printing" is and convert its production to that type if possible so that plants may survive the war.

Industry on Voluntary Trial Basis

Just at present, the industry is on trial by way of going through the process of eliminating voluntarily the so-called "extravagant type of printing." Coming within this category seem to be certain types of four-color process work, overall solid and bleed page printing in black and color, wide margins in publications, use of an excessive number of wire staples, and other practices which have been more or less standard in normal times. It seems to *Printing Equipment Engineer* that one of the surest ways in which executives may keep themselves familiar with "essential printing" is to join forces with the newly-launched Graphic Arts Victory Campaigns Committee which received WPB's blessing as announced in last month's issue. The outlet for the industry in this activity is tremendous—but it does call for *collective* action among those associated with the Graphic Arts Industries—and present conditions make collective action imperative.

Cleveland Meeting

On Monday night, October 12, 550 members of the Graphic Arts Industries assembled at the Mid-Day Club to listen to two representatives of the Printing and Publishing Branch of the War Production Board. The speakers were Deputy Chief E. W. Palmer and Newspaper Specialist Leon A. Link.

Throughout his talk, Mr. Palmer stressed the necessity for the printing industry to conserve materials and to develop and use substitutes for the critical materials which undoubtedly are becoming more critical.

Particularly, in discussing the various metals consumed by the printing industry, he said that not a single metal used in the industry is produced 100% in the United States. Of the 13 most critical materials 11 are important elements in the printing craft. He conveyed that because many of our sources of supply of critical metals have been either reduced or eliminated entirely, it will be necessary for the industry to get along without them or find substitutes. In this connection he said: "I am asking the industry to hold to the lowest consumption possible of these metals and every critical item. In the American way of life, ingenuity always has followed need. During the last ten days, for instance, an impregnated paper plate for lithographers to be used as a substitute for aluminum and zinc plates has been announced.[1]

[1]Mr. Palmer informed *Printing Equipment Engineer* that the name of the sponsor is The Plastolith Company, Craig Toland, Boston, Mass.

Other substitute-for-metal lithographic plates are: Lithomat and Photomat synthetic plastic plates, see page 32, April 1942 issue of *Printing Equipment Engineer*. These plates are sponsored by Lithomat Corporation, 170 Summer St., Boston, Mass.

Another non-metallic plate, called "K-tin Plastic Photo Offset Plate," is described in this issue. It's sponsor is Litho Chemical & Supply Co., 63 Park Row, New York, N. Y. Announcement, however, is made that this plate may not be available for civilian use, since Government may consume the entire supply.

It was announced in a dispatch coming out of Washington that William G. Chandler, 60, advisory board member of the Scripps-Howard Newspapers, has been made Chief of the Printing and Publishing Branch of WPB by Donald Nelson. He assumed his new duties in Washington on Monday, November 2. He is on a six-month leave of absence as a member of the Scripps-Howard advisory board in New York. For many years, he devoted close attention to the print paper situation and it is reported it will be in that capacity which he will render service to the War Production Board.

"We need to conserve metal and every other item which is used in producing printed matter," said he, "or else we will find that there are not enough materials to satisfy military needs. No government agency wants to clamp down upon you but you are expected to obey the rules. It is possible to get by and still live within the orders.

"We ought now to recognize one thing —if copper, nickel or zinc run out and it means the difference of not giving the guns and cartridges to our boys, we'll give it to the boys no matter what it means to industry."

The speaker supplemented his Des Moines, Ia. and Hershey, Pa., comments upon the paper situation, he said: "The hysteria created last fall existed because people thought there was a shortage. There is no paper shortage at the present time." He warned, however, that a paper shortage can be created through a decrease in manpower, electric power and transportation facilities.

Industry Concentration

It was apparent from Mr. Palmer's statements that WPB is giving considerable attention to industry concentration, when he said that in the United States and Canada there are about 740 paper mills. During 1941, about 20,000,000 tons of paper were produced. A recent analysis shows that this paper tonnage could be produced by 120 mills operating 100% of the time.

Mr. Palmer discussed the use of substitute and alternative materials and curtailment in the use of critical materials by civilian industry. Surveys are being made continuously of the printing industry on a national basis, and it is hoped in the event of dislocation due to curtailment of materials that personnel could be eased into war work without too much suffering.

Curtailment Coming Rapidly

Coming rapidly is curtailment of critical materials—more than industry can take in one gulp. He cited the instance of the container industry which makes metal and tin cans. In view of WPB regulations curtailing metal plate stock for fabricating containers, he said manufacturers turned quickly to paper—the one material which is readily available. One answer to the metal container problem is that packaging must go to paper.

He touched briefly on the manpower which formerly was employed to do the logging in the forests, saying that it had been drained off to other industries. Trees formerly cut for pulpwood are now cut for lumber. Large fiber containers are used increasingly for overseas shipments.[2]

Link Urges Plant Meetings

Newspaper Specialist Leon A. Link, who is associated with Deputy Chief E. W. Palmer in the Printing and Publishing Branch of WPB, followed Mr. Palmer on the platform. Among other subjects related to helping win the war, Mr. Link discussed the saving of materials in the plant. "It is ridiculous to think enough material could be saved in one plant to win the war," he said. "That may be true, but enough material can be saved in each plant to save the lives of our sons and brothers who are fighting the war."

Particularly, Mr. Link urged the holding of plant meetings in order to give employees an opportunity of forming voluntary groups for aiding in the conservation of critical materials in every way possible.

"The Printing and Publishing Branch of the War Production Board, said Mr. Link," is trying to pass on to you the most accurate and beneficial information we are able to secure. This information is based on daily contacts with the different branches in charge of materials used in this industry. None of us are able to look into the crystal ball and tell you exactly what the situation will be, very far in advance. Many factors enter into that which are unknown to anyone.

"We cannot tell you of specific measures that are being considered at the present time, by the War Production Board, because we are not permitted to discuss them in advance of their effective dates. We can tell you, that the needs of our fighting forces, of our allies, and of lend-lease will be supplied first, before materials will be available for private industry, regardless of the industry. The needs of the fighting forces is increasing as production of war equipment increases. We are not going to have all we would like to have. No matter what sacrifices we may be called upon to make, they will at the most, be little, as compared to the sacrifices our fighting men are making. They must have equipment and supplies to make certain a conclusive victory.

"Many times recently I have been reminded of the determined fight our men put up in the Phillipines, that gallant defense of Bataan and Corregidor. We have learned, that during those days and nights of continuous fighting, with much suffering to withstand and with great odds to face, they hopefully looked into the sky for the planes they expected would come, bringing supplies and assistance. Those planes did not arrive.

"It is we, here at home, who must make this equipment, that will eventually release them from the fangs of Japanese torture. Is there a man, or a woman, who breathes the free air of our land, who is not willing to work, to sacrifice and to pray for a victory that must be achieved, at the earliest possible moment? World events have put us to the task. You and I have much we must do here at home. From here on out, let not our men again look toward the heavens for the ships that did not come."

Supreme Transfusion

In his Des Moines (Ia.) speech, Mr. Palmer said, in part:

"Time and again it has been stated that the Printing and Publishing sector of the industrial fabric of the nation has, up to now, hardly felt the hand of war necessity. True, but not so from now on out. The diagnosis of the master surgeon has determined that blood, the life blood from many arteries of industry, must now be given in one supreme transfusion, to assure the certainty of feeding the huge and vital organ of war production with the life-giving and renewing stamina of critical materials and of manpower.

"Frequently, the question is asked of us in Washington, 'Is the printing and publishing industry rated as an essential industry?' Our answer is uniformly the same: 'Yes, the printing and publishing industry *is an essential civilian industry*'; but what happens to even essential civilian industry during an all-out struggle that means life or death to the entire nation and to every industry in that nation? The answer is quite simple and equally understandable; *all* industry, and particularly all civilian industry that cannot be readily converted to direct war effort, *must* stand whatever curtailments of materials, of manpower, and of end-product production that are necessary to provide the essential elements of war production so vital to victory.

Major Life-line is Paper

"The major life-line of the printing and publishing industry is paper. In

(*Continued on Page 36*)

[2] *Editor's Note*—Other consumers of pulp are: Nitrating plants which convert it in the manufacture of war materials in immense quantities; paper is now being used in place of metallic foil for wrappings; it is reported that airplane wings are now being manufactured from pulp in combination with plastics.

Equipment and Supplies

Plastic Offset-Lith Plate

In October, announcement was made that Litho Chemical & Supply Company, 63 Park Row, New York, has developed in its laboratory a plastic plate for use in printing halftone and line work by offset-lith as an alternative material for aluminum and zinc plates. Concurrently, the inventor, Thos. R. Caton, who is president of the Litho Chemical & Supply Co., stated: "While our plate is perfected, we are not in mass production as there is much equipment to be built and installed. We hope to begin volume manufacture of our plate by January 1. I fear the news of this plate development cannot offer much to cheer the commercial trade as it appears the Government will requisition our entire output."

The plate will carry the trade marked name: "K-tin Plastic Photo Offset Plate." In appearance, the plate is transparent and bears a grain similar to the 00 grain of a zinc plate. As received from the manufacturer, before putting the plate into use, it is dampened with water and is then coated in a whirler with a coating solution furnished by the inventors. No counter-etch or pre-etch is necessary.

After the plate has been dried in the whirler, it is printed in contact with a negative in a vacuum frame. The exposure time is approximately the same as when egg albumin solution is used. After exposure, a special developing ink is applied to the plate which is then rubbed to a thin even film until dry. Development then takes place in a warm bath.

After development, no etch is applied to the plate. At this time, a coating of gum arabic is advisable but only to protect the plate against finger prints or contact with ink while the plate is being positioned on the press. Just before starting the press, the gum solutions sponged from the plate, the dampening rollers are dropped for a few revolutions and then the ink rollers are dropped into position. A special fountain solution is used.

It is stated that the new plastic plate can be produced at a saving over the cost of zinc and aluminum plates. The plate may be regrained chemically in the offset-lith plant by applying a special chemical solution with a brush and rinsing the plate in water. It is also stated use of the new plate will effect savings in production time and chemicals costs, since the only preparations involved are the sensitizer, developing ink and the use of the fountain solution. Lines can be drawn on the plate with a needle. Solids can be drawn with copying ink.

President Caton said the plates will be furnished in all sizes for Harris, Rutherford, Webendorfer, Multilith and Davidson presses up to 19¾ in. by 23 in.

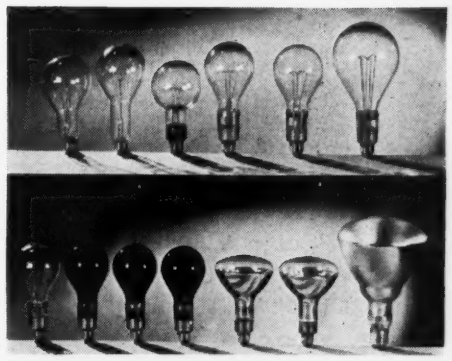
From the information available it does not appear whether a portion of the expected volume production will be apportioned for essential civilian use. Apparently, from Mr. Caton's announcement, the entire output is needed for essential war purposes, even though the plate was developed originally as an alternative product for use by regular commercial plants.

Red and Orange for Blackouts

DURING the last war blue light was commonly used for blackout purposes. This color was known to be hazy and indefinite and to be quickly scattered by atmosphere. According to more recent investigation by government engineers, eye experts and lighting authorities, however, blue is far from desirable. The Color Research Laboratory of the Eagle Printing Ink Co. Div., General Printing Ink Corporation, offers the following summary of facts.

Bombing at night requires perfect dark-adaptation of the aviator's eyes. Under this condition the eye is particularly sensitive to blue, particularly over the outer boundaries of the retina. Red, on the other hand, is seen only over a relatively small area of vision and is thus difficult to detect. As a matter of fact, while yellow and orange have highest visibility to a light-adapted eye, in darkness the brightest region of the spectrum is blue and blue-green.

Certain blackout regulations now call for bulbs coated with black and having a small circular opening that is orange in color. This has the advantage of screening out blue rays and yet affording a fairly normal appearance in the dim lighting of an interior.

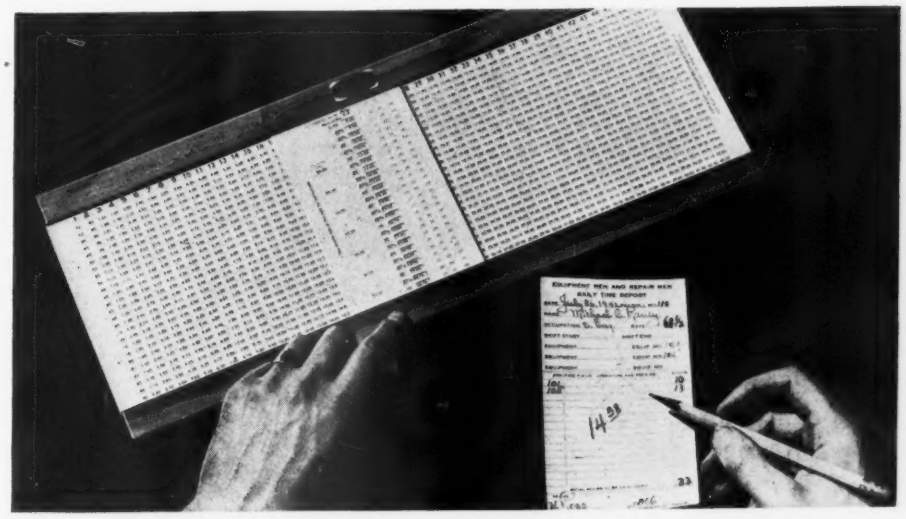


Infra-Red Heat Lamps

A complete new line of infra-red heat lamps, designed in keeping with the limitations imposed by the War Production Board, has been announced by the Birdseye Division of the Wabash Appliance Corporation. The new line includes six clear types, three ruby types, and four reflector types. All feature the M-type tungsten filament for uniform heat distribution and the bases are reinforced with asbestos-lined mechanical straps to withstand the terrific temperatures of tunnel installations. The reflector types have built-in reflector linings of pure silver sealed inside the bulbs for protection against dimming and tarnishing by fumes or dirt. Average burning life on all is in excess of 6000 hours.

For baking, drying and dehydrating, infra-red energy is said to accomplish a better, faster, cheaper and easier job than more conventional heat treating methods. Instead of heating from the surface slowly inward, the infra-red rays penetrate deep down into the surface films to start the baking process from the inside out, instantly and uniformly.

The entire subject is covered in new literature being issued by the Wabash Appliance Corp., 345 Carroll Street, Brooklyn, N. Y.



Cost and Payroll Calculator

Pay rolls and job costs can be figured in a fraction of the usual time through the use of a new calculator, according to the manufacturers, the Berger-Bricker Company of 433 South Spring Street, Los Angeles, California.

Operating on a simple new principle, this device includes all hourly rates of pay from $0.50 to $1.75 with a half-cent spread between rates. It covers all time periods up to 104 hours with divisions of one-tenth of an hour. It is handsomely made of lacquered wood and easily fits into a desk drawer.

Hoe Makes Further Contribution To War Effort

AS the result of the successful formation of "Artists for Victory, Inc.," President Harry M. Tillinghast of R. Hoe & Co., New York printing machinery manufacturers, has persuaded his company to cooperate with the Artists for Victory by providing the final organization link for insuring reproduction of the winning war posters created by members of the new association as well as distribution of the posters throughout the country.

Chairman and President of Artists for Victory is Hobart Nichols, noted American artist. Irwin D. Hoffman, in the front rank of contemporary American artists, originated the idea of an all-out National War Poster Competition as a means for enlisting the untapped talents of America's artists. Mr. Hoffman was appointed production manager for Artists for Victory in cooperation with Theodore S. Ruggles, director of Visual Education of the Council for Democracy.

Stamp of approval for the national effort was secured from OWI, OCD, WPB and the U. S. Treasury Dept.

Nine prizes, each consisting of $300 in War Savings Bonds for the winning posters were provided as added incentive. Production Manager Hoffman reports that more than 2000 entries have been received from all parts of the country. Announcement of the winning posters by a jury of selection consisting of prominent men in the art field or in closely associated fields, will take place at the Museum of Modern Art, New York, N. Y., during the latter part of November.

The final reproduction of four of the prize-winning posters has been guaranteed by R. Hoe & Co., Inc. The four posters sponsored by the Council for Democracy will be reproduced through the cooperation of the Lithographers' National Association. OCD has agreed to distribute reproductions of the posters on a wide scale through the country.

The winning posters and other successful ones chosen by the jury of selection will be formed into an exhibit at the New York Museum of Modern Art for one month and later will be traveled about the country.

R. Hoe & Co., through President Harry M. Tillinghast, is aiding in the war effort by sponsoring production and distribution of winning war posters entered in a national contest conducted by Artists for Victory, Inc.

It has been announced that every effort will be made to interest industrial companies, as well as Federal Government agencies, to acquire and make use of these posters.

It is expected that the country's Graphic Arts Industries can be relied upon to lend their cooperation to insure proper reproduction and thorough distribution of the war posters so as to give the public a clearer picture of the war's purpose. Requests for more detailed information by interested companies should be addressed to Artists for Victory, Inc., 101 Park Ave., New York, N. Y.

5000 Tons of Scrap

It is estimated by Secretary James E. Bennet of the National Printing Equipment Association, that the membership of the association turned in approx. 5000 T. of scrap in the recent Scrap Collecting Campaign. Twelve members of the association who reported to Secretary Bennet at the request of President T. R. Jones, turned in 6,496,333 lbs. (3248 T.) of metal scrap.

and other paper users. If and when the curtailment orders come, however, Palmer said it would be up to the publishers to choose their own methods of conserving available supplies.

Some of the possibilities which he said the publishers talked about were fewer regular editions and fewer pages, elimination of some special editions. Palmer explained that WPB will merely tell the publishers how much paper they can use, leaving it to individual publications to fit their programs to their paper quotas.

Commercial Printing and Lithographing Advisory Committee

For some time now, the War Production Board, through the Division of Industry Advisory Committees, has been forming Committees to act in advisory capacity to each particular branch of WPB. Just recently, announcement was made of the formation of a Commercial Printing and Lithographing Advisory Committee. The government presiding officer is E. W. Palmer, Deputy Chief, Printing and Publishing Branch.

Personnel of the Committee is as follows:

Everett Bierman, Charlotte Engraving Co., Charlotte, N. C.

A. H. Brewood, A. H. Brewood, Inc., Washington, D. C.

Oliver S. Bruce, Baker-Jones-Hausauer, Inc., Buffalo, N. Y.;

T. E. Donnelley, R. R. Donnelley & Sons Co., Inc., Chicago, Ill.;

W. S. Forbes, Forbes Lithograph Mfg. Co., Boston, Mass.;

Schell Furry, National Typesetting Corporation, St. Louis, Mo.;

J. C. Hall, Hall Brothers, Inc., Kansas City, Mo.;

Alfred R. Knop, Knop & Brauers, Inc., Milwaukee, Wis.;

Thomas B. Sheridan, American Bank Stationery Co., Baltimore, Md.;

Joseph M. Stegel, The Trade Bindery, Inc., New York, N. Y.;

Frank J. Smith, John P. Smith Co., Rochester, N. Y.;

Louis H. Traung, Stecher-Traung Lithograph Corporation, San Francisco, Calif.;

Elmer G. Voight, Western Printing & Lithographing Co., Inc., Racine, Wis.

J. Homer Winkler, Ace Electrotype Co., Cleveland, Ohio;

Recent WPB Orders and Activities

Newsprint and Other Paper Production Said to be Due for Freeze

ACCORDING to an AP dispatch coming out of Washington on October 28, newsprint and other paper production will be frozen at present levels shortly. This is expected to be the first step in a program for curtailing the use of paper for publishing purposes. Newspaper representatives who met with Deputy Chief E. W. Palmer of the Printing and Publishing Branch, WPB, were warned that "the freeze order would not be the end of curtailment." It is not known at the moment just what percentage will be imposed.

Reasons for the paper curtailment are to effect conservation of manpower, electric power and transportation facilities. Canadian newsprint mills commenced operating under a government permit system on November 1, hence the need for early action in the United States.

According to a WPB official, the "freeze order" might be administered by a man who has had first-hand experience with newspaper publishing problems.

The "freeze order", apparently, will make little change in the size, number or appearance of newspapers, magazines

Container Makers Warned

WARNING that critical materials for the manufacture of containers are becoming increasingly scarce, the Containers Branch of the War Production Board on October 15 issued an urgent appeal to the industry to concentrate all their research facilities on the development of usable substitutes.

While many substitutes have been developed and already are in use, the proportion of containers still made of critical materials is considerably in excess of what it should be in the light of the present military demands for those materials, it was pointed out.

The Branch emphasized that the container industry and those who use containers for packaging their products

should not rely on the War Production Board for development of substitutes. Responsibility for developing such substitutes rests largely with the individual manufacturers, it was stated, although the War Production Board is prepared to offer whatever assistance and guidance its facilities permit.

Substitutes should be designed to use a minimum of raw materials, even though the materials required are not at present in the critical category.

Nelson Appoints Sterling

CHAIRMAN Donald M. Nelson of WPB announced on October 24 the appointment of Donald J. Sterling, managing editor of the Portland (Ore.) *Journal*, to advise with him on wartime production and operating problems arising in the newspaper and publishing fields. Mr. Sterling will help the Chairman coordinate consideration of such matters as the newsprint and paper situation, supply problems in metals used in the industry, and other problems which face the newspaper, magazine, and other publishing industries. The new appointee will not have a staff, and his job will be advisory to the Chairman, not an operating one.

P. and P. Appointments

D. B. FELL, formerly associated with the Miehle Printing Press and Manufacturing Company, Chicago, has been appointed Chief of the Machinery and Equipment Section of the Printing and Publishing Branch, succeeding Herbert W. Blomquist, it was announced on October 29 by Deputy Chief E. W. Palmer. Mr. Blomquist resigned to take a position with the Smaller War Plants Corporation.

At the same time, announcement was made of the establishment of a Priorities and a Production Requirements Plan Section within the branch with Philip Schneider, formerly of the Crowell - Collier Publishing Company of Springfield, Ohio, as chief. He will be assisted by Richard P. Lund. Harry West is the Priorities Officer assigned the Printing and Publishing Branch.

Photoflash Bulb Making Cut 65%

IN an amendment to Lamp Order L-28, covering incandescent, fluorescent and other discharge lamps, WPB on October 24 ordered production of photoflash and photoflood bulbs cut 65%, based on 1941 output. Sales are restricted to newspapers, periodicals, news and newsphoto syndicates, all of which must certify that they come under one of these classifications when they purchase bulbs. Thus, news photographers are assured a supply of photoflash bulbs *after* all military requirements are met, but supplies of the bulbs to amateurs, studio photographers, and other non-military users are cut off.

Manufacturers or wholesalers are permitted to sell photoflash or photoflood incandescent lamps only:

(i) To a manufacturer or wholesaler;

(ii) In fulfillment of purchase orders or contracts bearing preference ratings of AA-5 or higher;

(iii) To publishers of newspapers or periodicals, or to newsphoto or newsphoto syndicates, in fulfillment of purchase orders or contracts bearing the following certification:

"We publish a newspaper or periodical (or we are a news or newsphoto syndicate) and will use the lamps covered by this order in the operation of such business."

The amendment also sets up other regulatory provisions which chiefly are of interest to manufacturers of lamps and component lamp parts.

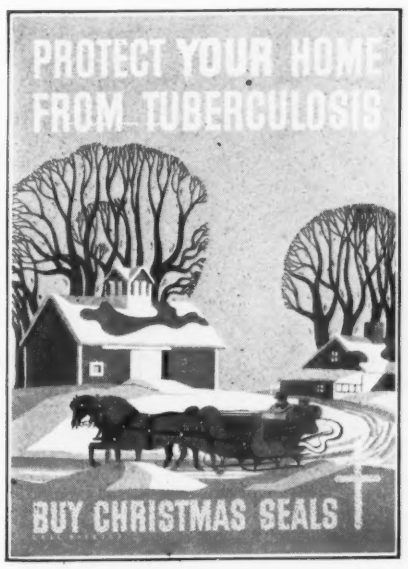
Engraving Zinc Order Is Modified By WPB

ON Friday, November 13, it was announced that the War Production Board had granted an increased use of photo-engraving zinc. The original WPB order stipulated that newspapers, photo-engravers and others using zinc plates in printing could use 50% by weight of the amount of zinc used by them in the corresponding quarter of 1941.

Effective November 15, the amendment increased the permitted zinc consumption from 50% of the amount used in the corresponding months in 1941 to 75%. After February 15, however, the usage will be cut to 50%. The amendment was made to permit more time to adjust usage downward.

A WPB representative emphasized that the base period took in the first 1½ months of 1941 and the last 1½ months — not the 3-month period starting November 15, 1941.

According to an AP dispatch from Washington, D. C., the action took the unusual form of an amendment to the order governing use of obsolete zinc plates, the amendment containing an exception to the general zinc conservation order.



Selective Service Lists 92 Communications Jobs as Critical

SELECTIVE Service Headquarters on October 19 notified local boards of 92 occupations, in the communication services, which are to be considered "critical" when classifying men for the call to arms. The list was issued in accordance with certification by the War Manpower Commission that communication services are essential to the support of the war effort.

Draft deferment of men on this list continues to be at the discretion of the local boards, Selective Service information men emphasized. In general, deferment is determined by the answers to three questions:

1. Is the man in an essential service?
2. Is his job essential to the functioning of that service?
3. Is he irreplaceable in that job?

The new listing is designed to answer questions 1 and 2.

In classifying registrants employed in these activities, Selective Service Director Hershey said, consideration should be given to the following:

(*a*) The training, qualification, or skill required for the proper discharge of the duties involved in his occupation;

(*b*) the training, qualification, or skill of the registrant to engage in his occupation; and

(*c*) the availability of persons with his qualifications or skill, or who can be trained to his qualification, to replace the registrant and the time in which such replacement can be made.

Here are the communications jobs set down as "critical":

Accountant, cost
Bankman
Cable engineer
Cable-lay-out man
Cable splicer
Cable tester
Cameraman, newsreel
Carpenter, maintenance
Central-office installer
Combination man, telephone and telegraph
Composer operator
Compositor
Control-room man
Control supervisor, junior
Control supervisor, senior
Cutter, newsreel
Cylinder-press man

Director, international broadcasting

Editor, managing
Electrician (all around)
Electroplater
Electrotyper
Engineer, professional and technical
Engraver, lithographic

Film editor, newsreel
Foreign-language announcer-translator
Foreign-language-news-or-script writer
Foreman, composing room
Foreman, electrical work
Foreman, press room
Foreman, welder

Imposer
Instrument maker

Jackboard operator

Lineman, telephone and telegraph
Linotype operator
Local-test deskman

Machinist (all around)
Make-up man, printing
Manager, employment and personel
Manager, production
Mechanic, electric maintenance
Mechanic, maintenance
Mechanic, mechanical tabulating equipment
Mechanic, radio communication office
Monotype-keyboard operator

Offset-press man
Overlay cutter

Photocomposing-machine operator
Photoengraver
Photolithographer
Photoradio operator
Platen-press operator
Power-house engineer
Press operator, cylinder
Press-plate maker
Printer (all-around)
Private-branch-exchange installer
Private-branch-exchange repairman
Production man, bilingual
Program-transmission supervisor

Radio operator
Radio repairman, broadcasting
Recording engineer
Rigger, radio

Sound engineer, newsreel
Station installer
Station repairman
Stencil operator, photographic
Stereotyper (all around)

Telegraph operator
Telegraph-repeater installer
Telephone inspector
Telephone-plant powerman
Telephone station installation supervisor
Telephone-switchboard repairman
Teletype installer
Teletype repairman
Tester, transmitter
Testing-and-regulating man
Toll-line repairman
Toll-office repairman
Tool maker
Traffic chief, radio communications
Transferrer, hand
Transformer repairman
Translator
Transmission engineer

War correspondent
Web-press man
Welder (all around)
Wire chief

Etching of Zinc Electrically Now Reported to be Practical

By ALBERT R. KRECK*

*President, Johnstone Electric Co., Inc., Chicago, Ill.

CONSIDERABLE interest has been created throughout the photo-engraving industry by the Johnstone Electric Company's announcement that zinc printing plates may now be etched by electrolysis.[1] Line or halftone zinc plates are being etched in comparable time to that where the nitric acid method is used but without employing critical chemicals or acids. Months of patient research in the plant of the Johnstone Electric Company's plant finally resulted in the satisfactory dissolving of zinc by the new process.

The accompanying halftones show the results obtained with 65, 75 and 100 line screens by the new electro-zinc process in the engraving department of the Chicago *Tribune*.

[1] *Editor's Note*—See preliminary news item, page 15, September 1942 issue of *Printing Equipment Engineer*.

Mr. Kreck is negotiating with WPB for permission to build a limited lot of machines. It is not known, at the moment, whether permission has been granted to permit the company to proceed.

Recently, the Chicago *Tribune* consented to try out the process in its engraving department. Through the patience and cooperation of this newspaper's production department, it was possible to ascertain what changes and adjustments would have to be made for operation under actual production conditions by the new process. As a result, halftones and line work have been matted into stereotype plates and the printed results are reported to be satisfactory.

Electro-Zinc Etching

Taking one of the *Tribune's* Johnstone electric etching machines which had been used for etching JEM metal, a conversion was made to adapt it for the etching of zinc. Air agitation as used in the etching machine for JEM metal is not practical for etching zinc by the new acidless method, so a mechanical agitator was installed.

Prior to etching, no changes are made in the plate making procedure. At the Chicago *Tribune*, cold top and the regular dragons blood method of powdering are used. Ink top and the roll-up system have not as yet been tried but it is believed that these will work out satisfactorily.

Instead of putting the plate into the acid bath, it is immersed in the electrolyte and hung on the positive bus bar by means of a clamp. No etching action occurs until the switch is thrown and the voltage has been set, which is usually 12 to 18 volts depending upon the size of the plate.

The solution is mechanically agitated in such a way that the bottom of the plate is kept smooth and clean and also maintains the chemical content of the bath substantially even throughout.

While the etching is in progress, the plate can be examined from time to time without having to be rinsed off with water. Etching rate is 0.001 in. per min. As no oxide is formed during the etching operation, the etched-out bare metal surfaces have the appearance of polished aluminum.

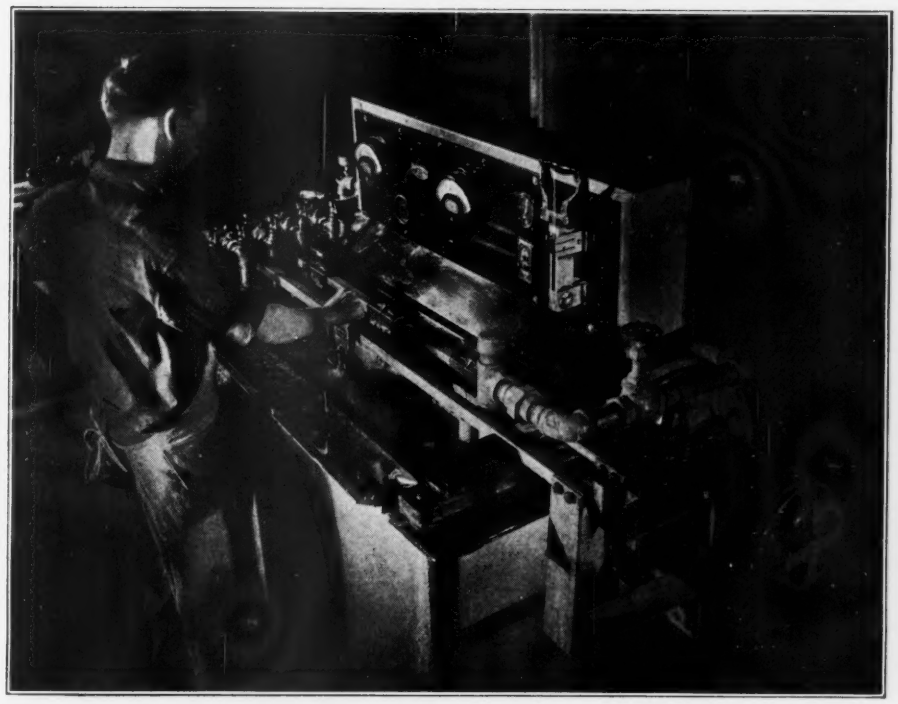
The special solution used as the electrolyte (patent applied for) is formulated of non-critical material and it does not generate corrosive fumes. The etcher will not be in danger of injuries from acid burns, thus eliminating entirely the need for ventilating ducts or drain piping.

Official QWI Photo—Acme

This zinc 75 line screen halftone was etched electrically in a Johnstone electric etching machine. Uniformly consistent depth of 0.0045 in. in the highlights is indicated by a depthometer. Shadow dots average 0.002 in. depth. The mounting flange and interstices between halftone dots have the appearance of polished aluminum since no oxide is formed in the acidless etching operation.

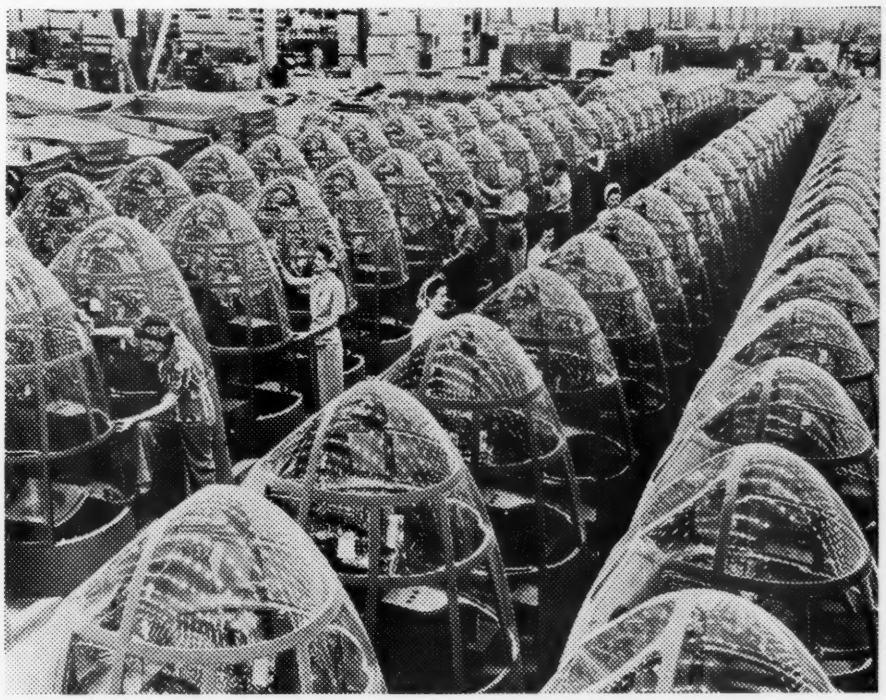
Right:

Printed direct from an electro-etched 120 line screen halftone plate. The plate was etched electrically in this copper and JEM metal electric etching machine which was converted into an electric zinc etching machine for etching zinc (line and halftone) without acid. Etching depth in the highlights of this 120 line screen halftone is approx. 0.0025 in.



Preliminary figures on operating costs including that of the special "electro zinc" electrolyte and electricity consumed indicate there will be a saving of approximately 25% to 40% over acid operation. The motor generators used are low voltage, high amperage units which are built for etching purposes.

As the electro-zinc machine has been in operation only a short time, each day brings improved results. Constant operation of these machines together with the research being carried on by the Johnstone Company along the lines of special current wave lengths and special zinc, it is thought, will make it possible to use this process extensively after the war.



Left: Official Marine Corps Photo—Acme

This halftone was printed direct from a 60 line screen halftone plate which was etched electrically in a Johnstone electric etching machine. Etching depth in the highlights is approx. 0.0055 in. throughout.

Gnawing at America's Productive Power

By Paul de Kruif

IN today's world so somber with lies, bloodshed, and the fear of death, there are still men who dare to draw blueprints for an honest, strong, gentle, laughing mankind of the future.

What has given them courage for such planning has been victory like that partly won against tuberculosis. Now the backs of all death fighters—not excepting those against the white plague—are to the wall. The call is for more death, and more, and we are all too likely to forget that, to kill our enemies efficiently, we cannot relax our fight for life. This is made especially plain by the condition of our battle against tuberculosis.

This year bids fair to find our vaunted national conquest of the disease at a standstill for the first time since World War I. The sinister sickness is beginning to flame high again. It gnaws at the vitals of America's productive power. It kills more and more Americans under the new strain of work in defense of our nation's life. The year 1940 saw an upsurge of the TB death rate in many of our leading cities. What may happen if we relax our war against this form of mass murder is shown by ominous warnings from across the ocean. In 1939, England, Wales, and Scotland were pretty well satisfied with only 29,000 annual deaths. Then came *their* strain of all-out war production effort. The white plague's toll, 1941, was well up in the 30,000's on that embattled island.

Here's the exquisite manner in which the white death pounces first of all on those under strain of the fight for national existence—it's shown by the fact that against tuberculosis the efforts of our British cousins have failed. This is one sickness where deaths show an upsurge. Even deaths by bombing have been curbed. England is a healthier nation than it was before the war began, in spite of all its dislocations and deprivations healthier—excepting for tuberculosis.

That the strain of war production does not itself mean the inevitable return of the white plague, is proved by the brilliant success of Detroit's fight against it. In that city, long before Pearl Harbor, the strain of industrial production against the world's would-be destroyers was already intense and terrible. In Detroit the conditions of life are lovely—for the TB microbe.

Detroit has driven its death rate almost down to that of the nation.

How has the city taken the lead in the nation's TB fight? By doing what *could* be done in every city and locality, every state in our country. Its men against death have no secret weapon. But, long ago, by the end of the 1920's, Detroit citizens saw to it that there were ample beds to house the tuberculous sick. Then its physicians and public health men organized to find those infected. And, having found them, by mass use of every form of active treatment including the most modern, they began an unprecedented mass-curing of tuberculosis. On the absolutely sound idea that a cured man cannot give the disease to others.

NEW ENGLAND EXECUTIVES

discuss conservation and technical problems in Boston at fourth Newspaper Mechanical Conference — Attendance more than 350

By STAFF WRITER

PROVING definitely that mechanical conferences are needed during these critical days, over 350 mechanical executives from daily newspapers and suppliers' representation in the New England area gathered at the Hotel Statler, Boston, on Saturday and Sunday, October 10 and 11 to attend the meetings of the fourth New England Newspaper Mechanical Conference.

It was noted that the slight drop in registration was due to the absence of trade representatives. the number of newspaper executives, however, was slightly increased.

Highlighted by an address given at the Sunday night banquet by Leon A. Link of the Cleveland *Plain Dealer*, who is also newspaper specialist of the Printing and Publishing Branch of WPB, a major portion of the time was spent on present-day problems and what newspapers will have to contend with during this war. A much more serious demeanor was noticeable at this conference than is usual at meetings of this type.

Mr. Link pointed out strongly the necessity for newspaper plants adopting conservation plans and going through with them, as well as explaining some of the problems that would have to be faced in the near future. The address was well received and the men left the hall with a little different thought on conservation than when they entered.

Reginald Orcutt of the Mergenthaler Linotype Co., gave a short talk on his recent trip to England relating observations while in Ireland and England.

The conference opened Saturday afternoon with informal parties, several of the men visiting Boston newspaper plants. In the evening a get-together party was held in the main ballroom of the Hotel.

Sunday morning the departmental clinics were held. This year the machinists were given an opportunity of getting off by themselves to discuss their problems in their own manner. This new clinic made a hit with all machinists and attracted many who had never before attended the conference.

Composing Room Clinic

George F. Marshal of the Portland *Express-Herald* presided as chairman.

The chairman called for ideas on air-raid blackout precautions which are being taken in various plants. Practically everyone has taken some sort of precautions whether running night shifts or not. Mr. Sorenson of the New Bedford (Mass.) *Herald* told of using regular blackout curtains, nailed across the top and snapped down on the sides which would hold the curtains in position even though the windows were open. All those having skylights in their rooms have painted them black. Wm. F. Madden of the Worcester (Mass.) *Telegram-Gazette* told of having charts made up showing locations of all light switches in order that all switches would be accessible to anyone in the room.

The next question brought on a long discussion as to what improvements have been made in the past year or two regarding advertising and news deadlines. John J. Mahoney of the Holyoke *Telegram* explained that his firm is forced to allow a little more leeway due to shortage of help in the ad composing department. Mr. McGowan of the Portland (Me.) *Press Herald*, told of cutting down the number of runovers from page 1 to overcome the handicap of late news stories.

The next question was related to new methods that have been adopted to save composing room materials, equipment and help. Wm. F. Madden told of one saving in his plant, that of having all halftones made the same depth thereby being able to have standard bases made up for all single, double and three-column cuts. Karl Engle of the Pawtucket *Times*, explained how cutting down on date lines saved one-half inch per page. A debate followed on whether it was practicable to sttempt to save Elrod material when killing pages. Chairman Marshall explained that in his plant the men saved long pieces of rules when killing forms. While the saving in manpower is not great it did represent a saving of metal.

It was suggested the Board of Directors appoint a committee to make a survey to see if some sort of system could be set up whereby various papers could check their page cost against others of somewhat similar size. Considerable discussion followed. John A. Burke, production manager of the Gannett Papers, explained that this was attempted at the ANPA conference held in Buffalo but the results were not very good, pointing out that many composing room executives did not want to change to a new system as it would eliminate the opportunity of comparing with old records. Mr. Bowles, publisher of the Springfield Papers, informed the members he was willing to set up a uniform system in order to get the ball rolling if such a committee was formed and would work it out.

Machinist's Clinic

Joseph M. Gallagher, chief machinist of the Hartford (Conn.) *Times* was chairman of the Machinists' clinic. Two speakers addressed the gathering for ten minutes each. Director of Agencies Walter F. Patterson of Mergenthaler Linotype Co., and Chief Engineer H. R. Freund of Intertype Corporation, outlined conditions in the line-casting machine field. Both stressed the necessity of conservation of materials.

Overcoming sinks in large size type slugs on line-casting machines came up for discussion. The general opinion was that by keeping the pot metal temperature at 540 deg. and the mouthpiece about 490 deg. should overcome this condition if the metal is in proper balance.

Mr. Lovett of the Worcester *Telegram-Gazette* stated he is using cork washers in place of leather in distributor clutches. He asserted they lasted longer and run smoother. Representatives of both machine companies stated leather is used in their machines.

"How often do you have trimming knives sharpened?" was the next question. Carl Braga of the Woonsocket (R. I.) *Call* stated he did not believe in sharpening trimming knives more often than absolutely necessary. When he noticed slugs ejecting hard from between the knives he rubs a piece of hard wood up and down the length of the trimming knives.

Some discussion occurred as to the best method of keeping quadding devices clean. Mr. Kerwin of the Pawtucket (R. I.) *Times*, told of using kerosene and giving the quadder attention every day or every week as it needs it. Mr. Lovett said he used to take them apart every week but in attempting to find out just how long they would go he had not taken

1942 Officers and Directors

(*New England Newspaper Mechanical Conference*)

President: Herbert T. Stanger, Production Manager, *Christian Science Monitor*, Boston

Vice - President: Chester M. Spooner, Production Manager, Pawtucket (R. I.) *Times*

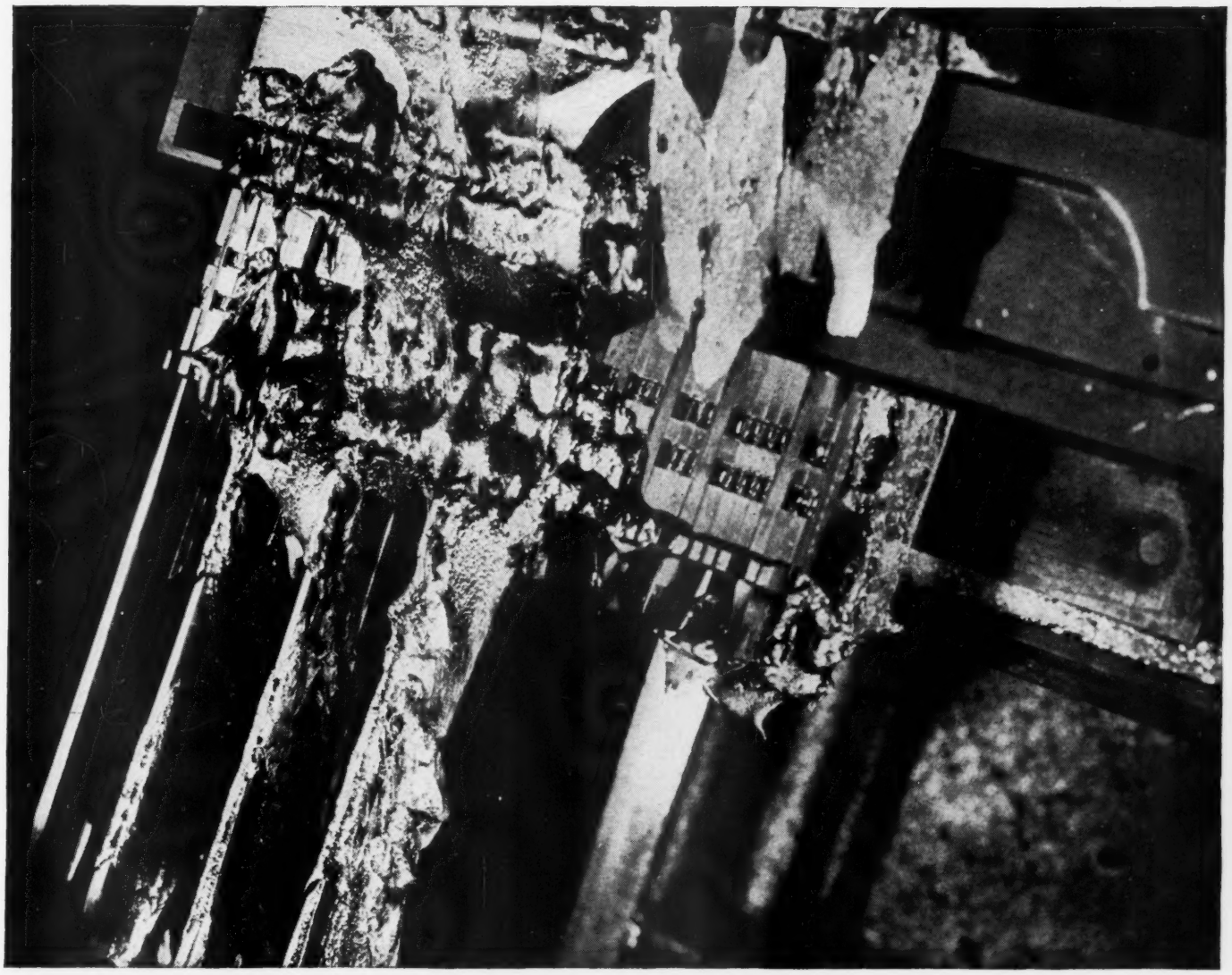
Secretary Treasurer: Walter C. Crighton, Composing Room Foreman, New London (Conn.) *Day*

Directors: One Year: Charles A. Staley, New Haven (Conn.) *Register;* John J. Mahoney, Holyoke (Mass.) *Transcript-Telegram*

Two Years: Glendon S. Magoon, Fitchburg (Mass.) *Sentinel;* Frank M. Britton, Nashua (N. H.) *Telegraph*

Three Years: Richard M. Fitzgerald, Worcester (Mass.) *Telegram-Gazette;* Russell A. Costello, Lewiston (Me.) *Sun-Journal*

Four Years: Joseph A. Addison, Hartford (Conn.) *Times;* Bernie F. Garrity, Hartford (Conn.) *Times*



3 HOURS SHOT!

A simple little squirt will knock the devil out of a line of matrices, to say nothing of damage to spacebands and first elevator jaws—and time lost for repair!

In these days, when every piece of metal counts—when every hour is vital—conserve time, energy and material with proper maintenance of your typesetting equipment. An easy daily routine is the best insurance against faulty machine operation. Many plants find the Linotype Life Extension Series of maintenance books especially helpful. Send for them—they're free!

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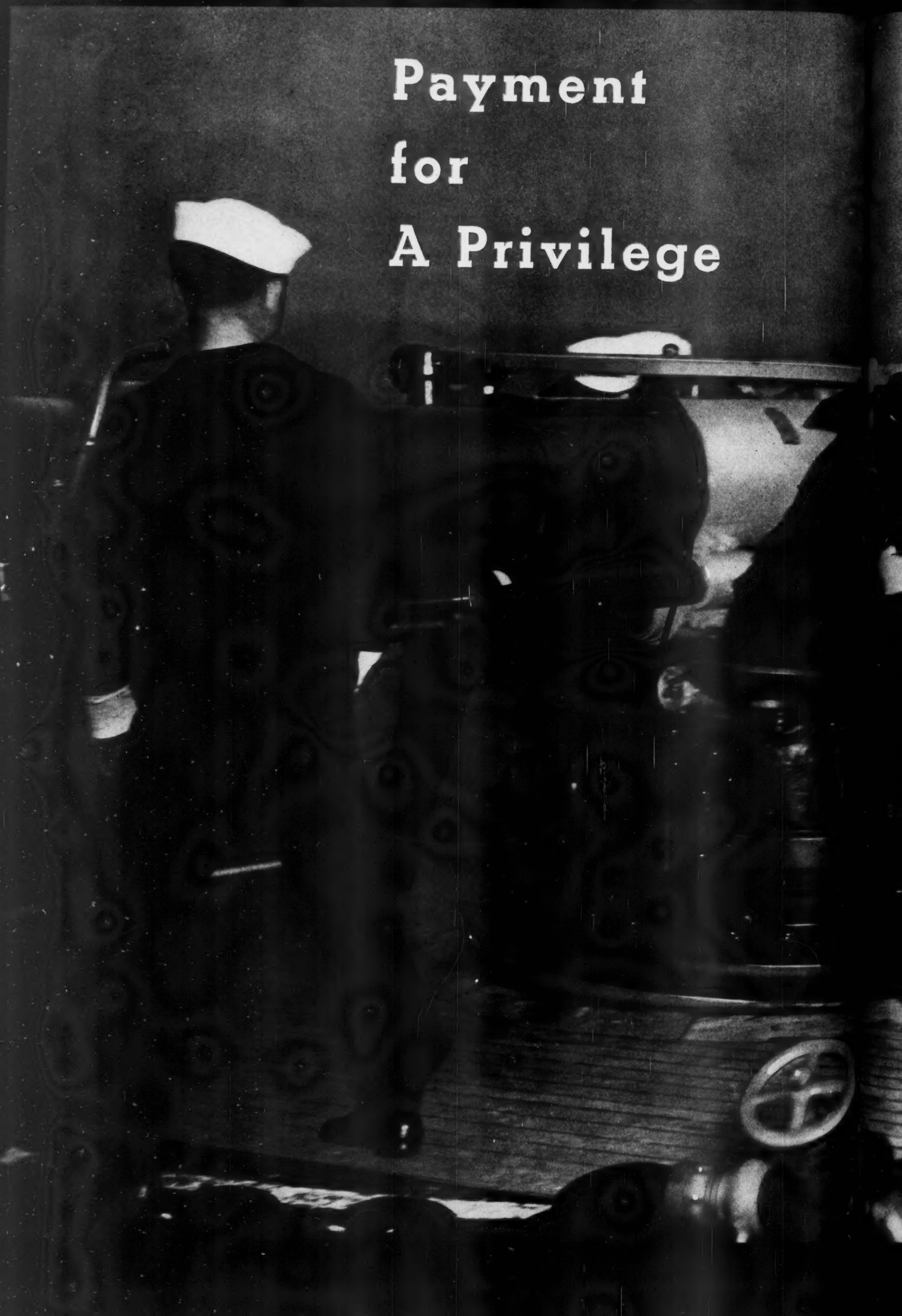


Some men are called soon to the colors; others go later on. Some will remain at home to operate the machines that produce the arms without which the bravest men in the world would be as chaff before the monster steel machines that wage war today. Some are given great responsibility; others very little. To each in the measure of his ability duty is assigned.

But whatever is asked, of individual or corporation alike, it should be given fully and without stint or hesitation. This is the payment every American owes for the privilege of living and being a citizen in this free, happy, and prosperous country.

With its known facilities for precision machine manufacture, Miehle was called early "to the colors." Long before Pearl Harbor, this company was manufacturing large quantities of ordnance for the U.S. Navy. In fact it is one of the first fourteen American Industrial Concerns to receive the famous Navy "E" award for "outstanding performance in the production of naval ordnance matériel." Since March of 1942, its facilities have been devoted almost 100% to the war effort. Very likely we shall not manufacture another Miehle press until the war is over. Very likely we shall not be able to maintain the same intimate relations with printer friends the country over. Whatever happens, we know that these same printer friends will understand why . . . for there is not one among them who, when the time comes, will not serve his country just as faithfully, unstintingly and wholeheartedly.

MIEHLE PRINTING PRESS & MFG. CO., Chicago, Illinois

Official U. S. Navy Photograph

them apart for eight weeks and added they were still running alright.

Stereotype Clinic

Edward J. Cook, Foreman Stereotype Dept., Springfield (Mass.) *Evening Union*, was chairman of this clinic. The speakers and their topics dealing with stereotype problems were: I. Tornberg, Wood Newspaper Machinery Corp., *Care of the Casting Box;* Frank Tighe, Certified Dry Mat Corp., *Mats and Their Problems;* Grant F. Wilbur, Imperial Type Metal Co., *The Metal Situation Now and During the Emergency;* Howard Simmons, Eastern Color Printing Co., *Color Printing with Stereotype Plates;* George Clark, American Publishers Supply, *Supplies and Their Shortages*.

The discussion period opened with the question as to what substitutes could be used in place of tin in stereotype metal. Grant Wilbur answered that to his knowledge there is no substitute for tin available at the present time. Experiments have been made with silver, but it is easier to get tin than silver.

Substitutes for cork molding blankets were then discussed. George Clark pointed out that in England molding is done with wool blankets and that experiments have been made in the United States with a paper blanket with a fabric lining, some of which are now in use in South America.

One member then asked Mr. Clark if use of a cork blanket daily without letup until it got so hard it had to be discarded was as good as rotating blankets. He answered that the best way to extend the life of these blankets is to rotate them and let them come back as much as possible, explaining that the cork is impregnated with a binder. If the binder breaks down there is nothing to do but discard the blanket.

Someone wanted to know how to eliminate the majority of buckles and other difficulties when manipulating dry mats where three-quarter inch shrinkage is required. Mr. Kearns of Burgess Cellulose Co., pointed out that it takes a little work and care to get this shrinkage and that good equipment is necessary. High shrinkage calls for slow heat at the start followed by high heat, but without the proper equipment to pull the mat back trouble is very apt to be encountered.

An executive asked: "We have considerable trouble printing halftones; how high should we mount them and how deep should they be molded?" Frank Tighe said that "the limiting factor in the height of the cut is how high you can run it without throwing off the type around the cut.

How can buckles be eliminated in mats which are allowed to lay around between the time of molding and casting? Mr. Tighe replied: "Pack and scorch them or put them in a storage box."

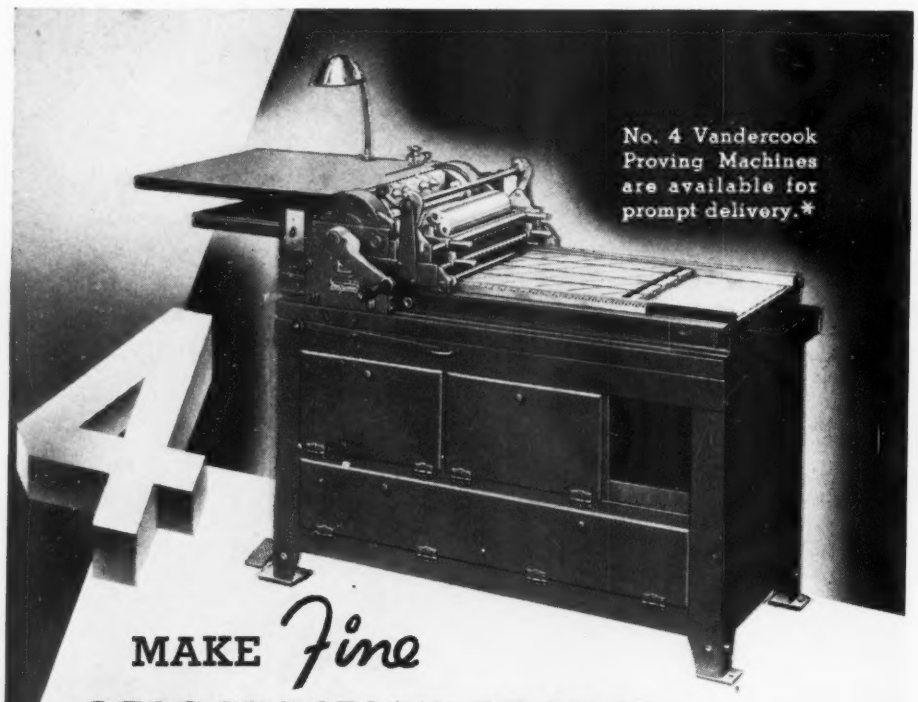
Sunday Afternoon Session

Program Chairman Frank M. Britton presided at this session and was assisted by the chairman of the six clinics. Questions relating to more than one department were discussed and several debates arose over which department should do the work or "hold the bag" for things going wrong or not giving good reproduction. One of these was a three-cornered affair between the engravers, stereotypers and pressmen with Mr. Williamson of the Boston *Post*, who represented the engravers, asking why 85 screen cuts could not be well printed in the papers. After many had entered into the discussion it appeared in summing it up, that all were ready to really make an attempt to get good results from cuts with finer than 65 line screen and most thought that the results obtained would be satisfactory and much better than most anticipated.

Another question was related to how much variation in plates should the pressmen allow the stereotypers. Reginald Reed of the *Christian Science Monitor* stated that in his plant, after checking plates every so often, they found not more than 0.004 in. variation in the plates. It was agreed that if the plates did not vary more than 0.004 in. the pressmen would be able to obtain good results without damage to their blankets.

One question about which no agreement was reached was "Why do engravers send cuts out that are over-etched when the time element does not enter the picture?" The discussion became heated with the engravers sticking to the point that in most cases the cuts were not over-etched but that the stereotyper was putting too much pressure on the cuts, causing the highlight dots to mushroom so that they curled over like a toadstool. Then when the mat was lifted

(*Continued on Page 30*)



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The No. 4 Vandercook is recommended for making Black on White proofs, or Transparent Impressions (with Transparency Attachment) for use in offset or rotogravure processes.

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PRINTING PATENTS REPORT

Covering Patents Issued September 29, October 6, October 13, October 20

This data is compiled exclusively for *Printing Equipment Engineer* by Invention, Inc., is verified in the United States Patent Office, and is comprehensive of all patents in the field of each heading for the dates specified.

For copies of patents listed here, specify the patent numbers and send 10c each (stamps not accepted) to the Commissioner of Patents, Washington, D. C.

Binding, Cutting, Perforating:

2,296,906. MACHINE FOR LINING THE BACKS OF BOOKS, of the type in which the assembled and stitched signatures are passed successively from station to station and strips of cloth and paper are glued on their backs for the purpose of attaching covers thereto. The chief object of the invention is to glue together two or more strips of paper with or without head bands and to apply a strip of the assembled parts to the back of a book at a single station, so that the book parts may be then subjected to a single series of pressing operations for securing the assembled strips in place. Invented by John S. Carlson, Norwood, Mass. One-half assigned to The Colonial Press, Inc., Clinton, Mass. Application April 4, 1941. 3 claims.

2,299,061. MECHANICAL BINDER MADE FROM THERMOPLASTIC MATERIAL, of the type comprising a longitudinally extending back from which a number of spaced curled fingers extend, the curled fingers constituting binding rings or loops. According to the invention, the binder is formed with a back that extends tangentially of the rings rather than radially. The comb for forming the binder is curled from the free ends of the fingers toward the back, rather than in the opposite direction, as was heretofore the practice. The fingers are curled to form rings or loops exceeding 360° and the back is not curled at all. The curling operation stops when the fingers form complete rings and before the back is curled. This not only produces a binder wherein the back extends tangentially of the rings, but also reduces the time required for curling the binder. Invented by Isidore Spinner, Chicago, Ill. Assigned to Plastic Binding Corp., Chicago, Ill. Application March 25, 1940. 5 claims.

2,299,715. HELICAL COIL BINDER FOR BOOKS, comprising two coils of plastic material such as "Pyralin", one of the coils being wound right hand through the perforations in the rear margins of the sheets and covers and the other being wound left hand. The two coils are threaded through the perforations in the manner of a screw and meet midway of the length of the book, where they are joined. Because of this construction, the pages of the book are restrained from lengthwise movement when opened and remain in register due to the reverse winding of the coils. Also, the coils themselves, are secured against movement. Invented by Rudolf Tauber, New York, N. Y. Unassigned. Application September 12, 1941. 3 claims.

Composing Room Equipment:

2,297,073. QUADDING AND CENTERING DEVICE for type or slug casting machines, whereby the feeding over of the matrices for quadding purposes may be dispensed with. One of the jaws of the machine, between which the type is delivered for casting, is movable and when the line of type matrices is fed into position, upon the proper trip being actuated, the movable jaw is carried into clamping relation with the line of type matrices and automatically locked, so as to securely hold the line of type matrices during justification and casting operations. In such a process, the face of the jaw itself serves as a background or body against which the casting is made, the face of the jaw occupying the position now occupied by the matrices fed in for quadding purposes. Invented by Harry D. Reese and Charles S. Edwards, Detroit, Mich. Unassigned. Application August 26, 1940. 7 claims.

2,298,081. APPARATUS FOR ARRANGING THE PRINTING SYMBOLS IN MUSICAL COMPOSITIONS for the production of printing plates. A feature of the invention resides in a novel form of support upon which note bearing elements may be assembled to form a musical composition which may be photographed or otherwise reproduced for making the plates. The support is so constructed that a musical composition set up in one key, may be transposed into another key without the necessity of shifting or rearranging the note or character bearing elements relative to the support. The support is of rectangular form and is constructed from soft or pliable material such as rubber, so as to insure a certain degree of flexibility, and also is provided with a reinforcing means consisting of a perforated plate of metal or wood. Invented by Edgar A. Cohen, Brooklyn, N. Y. Assigned by mesne assignments to Cherio Music Publishers, Inc., New York, N. Y. Application September 17, 1940. 2 claims.

2,299,191. SLUG CASTING MACHINE of the type wherein a melting pot is arranged to deliver molten metal into a slotted mold, so constructed that it can cast slugs which may be used as "furniture" to support the rules in a stamping form, such as the rules employed to cut and score relatively stiff blanks so that they then will be capable of being folded. Invented by William C. Toland, Brookline, Mass. Assigned to Mergenthaler Linotype Co., Brooklyn, N. Y. Application November 22, 1940. 16 claims.

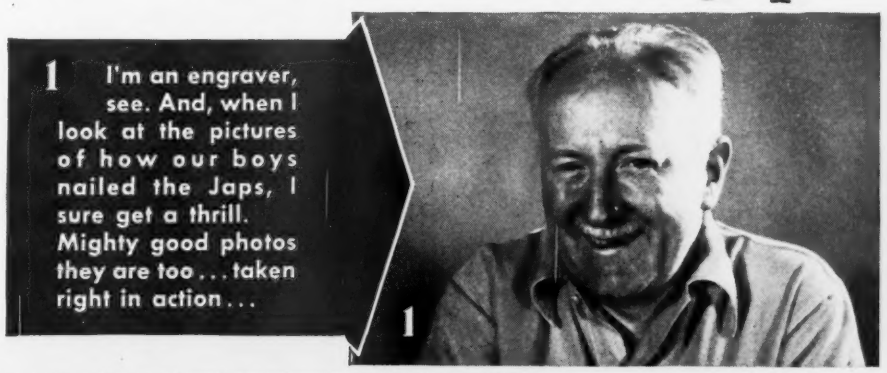
Feeding, Folding, Delivery:

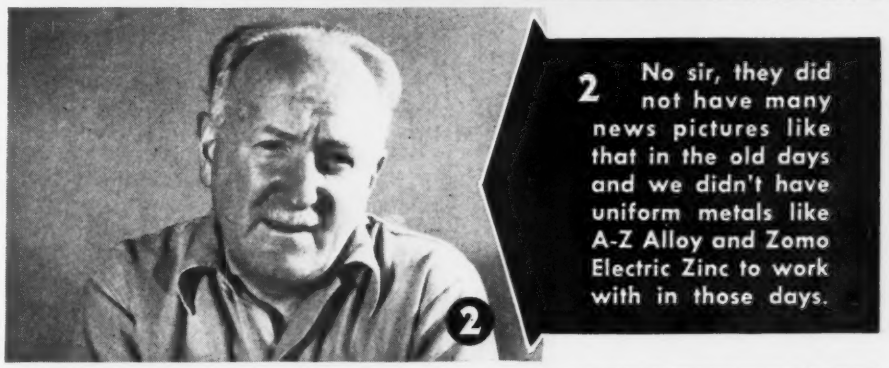
2,298,368. CALIPERING MECHANISM FOR SHEET FEEDERS, sensitively responsive to the number of sheets simultaneously passing through the mechanism which will selectively actuate elements of the machine in accordance with the number of sheets. In previous devices of this kind, if more than one sheet passed through the same, the feeder was entirely stopped by disengagement of the main driving clutch. But since two sheets frequently adhere, in perfect alignment and the fact that two sheets adhere does not necessarily mean that other sheets of the stack will adhere to the rear edge of the lower of the two sheets, there is no real necessity for stopping the feeder under such conditions, if the two adhering sheets can be disposed of in some other manner. According to the invention, if two sheets pass simultaneously through the mechanism, the calipering arrangement will be responsive to their number and will cause a reject member to be positioned in the path of movement of the two sheets to deliver them to a point other than the press or feed table and without stopping the feeder. However, if three or more sheets should pass through the calipering mechanism, the feeder is entirely stopped. Invented by George Goebel and Sherman A. Chantland, Baltimore, Md. Assigned to Crown Cork & Seal Co., Inc., Baltimore, Md. Original application June 10, 1935. Divided and this application January 20, 1939. 11 claims.

2,299,650. APPARATUS FOR CUTTING A TRAVELING WEB of flexible material, such as paper board, comprising a cutting cylinder having a cutting blade and a bearer portion, and an impression cylinder having an impression surface and a bearer portion, the bearer portions of the cylinders engaging one another and being so constructed and

(*Continued on Next Page*)

"We sure showed those Japs"


1 I'm an engraver, see. And, when I look at the pictures of how our boys nailed the Japs, I sure get a thrill. Mighty good photos they are too... taken right in action...
1


2 No sir, they did not have many news pictures like that in the old days and we didn't have uniform metals like A-Z Alloy and Zomo Electric Zinc to work with in those days.
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3 Today, with A-Z Alloy and Zomo Electric Zinc, you can reproduce all the precise tone shadings that make a picture live. They're quick, clean etching metals too.
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arranged with reference to the cutting blade and impression surface that the blade does not contact the impression surface during operative rotation of the cylinders. This construction overcomes the usual difficulty wherein the cutting blades contact with the impression cylinder, causing wear and requiring frequent replacement of the blades. Invented by Joseph A. Parks, Jr., Paterson, N. J. and James W. Batchelder, Titusville, Pa. Assigned by mesne assignments to Interchemical Corp., New York, N. Y. Application April 23, 1940. 16 claims.

Miscellaneous:

2,296,856. PROCESS FOR THE MANUFACTURE OF XANTHATES OF CELLULOSE COMPOUNDS, by treating in the presence of an alkali, a cellulose compound in which at least one hydroxyl hydrogen atom of the cellulose molecule $n(C_6H_{10}O_5)$ is substituted by an organic radical and which contains at least one free hydroxyl group capable of binding CS_2, with 3-7% CS_2, based on the weight of the cellulose compound. Products of the invention are useful as thickening agents or fixing agents for pigments in textile printing. Invented by Leon Lilienfeld, Vienna, Austria. Assigned to Lilienfeld Patents, Inc., Boston, Mass. Application March 27, 1936. 12 claims.

2,298,066. STABLE, NON-FUSIBLE ELASTIC GEL COMPOSITION, comprising a heat-treated mixture of at least 80% by volume of petroleum oil and a minor proportion of a synthetic organic compound capable of polymerization by virtue of at least two double bonds in the molecule, such as an ester of acrylic acid or alpha substituted acrylic acid, formed by combining with polyhydric alcohol. The compositions are useful in the manufacture of inking rollers and pads. Invented by Winton I. Patnode, Schenectady, N. Y. Assigned to General Electric Co., Schenectady, N. Y. Original application May 28, 1938. Divided and this application April 1, 1941. 7 claims.

2,298,147. TEXTILE PRINTING PROCESS for producing clear white illumination designs on vat color ground. This is accomplished by printing a design on a textile fabric with an emulsion containing wax and a hydrolyzable aluminum salt and drying the printed fabric on hot cans as rapidly as possible. This treatment endows the printed design with a temporary water repellancy which enables the fabric to be safely dyed with a vat color. Other auxiliary agents used in resist printing, such as glue, casein and albumen, may be used in conjunction with the emulsion containing wax and an aluminum salt. These auxiliary agents serve chiefly to give additional body to the printing pastes used. Invented by Charles Franklin Miller, Wilmington, Del. Assigned to E. I. du Pont de Nemours & Co., Wilmington, Del. Application July 13, 1940. 4 claims.

2,299,012. NEW CONDENSATION PRODUCTS, prepared by reacting a symmetrical substituted guanidine such as 1,3-didodecyl guanidine with a compound containing an ethylene oxide ring, such as ethylene oxide, preferably at a temperature of 150-200°C. and in the presence of a base such as sodium hydroxide. Products of the invention are surface active agents and are useful in the formulation of printing inks. Invented by Walter P. Ericks, Cos Cob, and James H. Williams, Riverside, Conn. Assigned to American Cyanamid Co., New York, N. Y. Application January 30, 1941. 1 claim.

2,299,135. PRINTING INK HAVING A HIGH MELTING POINT BINDER with a hard surface and gloss and water tolerance, and which will not set up on the press in the presence of high atmospheric humidity. In preparing the ink, phenolic resins are incorporated with a liquid polyglycol such as diethylene glycol as a solvent. The ink can be treated with water after printing to prevent offset and will set up quickly when so treated. Invented by Donald R. Erickson and Paul J. Thoma, Kalamazoo, Mich. Assigned to Michigan Research Laboratories, Inc., Kalamazoo, Mich. Application June 4, 1942. 2 claims.

2,299,244. NEW AZO PIGMENTS AND DYES, prepared by mixing an ice color coupling component and the reaction product of an ice color diazo component with an alkylol or alkoxyalkylol derivative of guanylurea. Stable alkaline printing pastes can be prepared from the mixture by dissolving it in alcohol or the like, together with the usual bases and thickening agents. Cotton goods can be printed with such a paste by a copper roll and subsequently developed by steaming in acetic acid or other acid vapors. Invented by Paul P. McClellan, Old Greenwich and Walter P. Ericks, Cos Cob, Conn. Assigned to American Cyanamid Co., New York, N. Y. Original application December 12, 1940. Divided and this application August 30, 1941. 3 claims.

2,299,245. NEW AZO PIGMENTS AND DYES, prepared by mixing an ice color coupling component and the reaction product of an ice color diazo component with an alkylol or alkoxyalkylol derivative of biguanide. Stable alkaline printing pastes can be prepared by dissolving this mixture in a solvent such as alcohol, together with the usual thickening agents, bases, etc. Cotton goods can be printed with this paste by use of a copper roller and the desired color may then be developed by steaming in the presence of acetic or other acid vapors. Invented by Paul P. McClellan, Old Greenwich and Walter P. Ericks, Cos Cob, Conn. Assigned to American Cyanamid Co., New York, N. Y. Original application December 12, 1940. Divided and this application August 30, 1941. 4 claims.

2,299,306. PARAFFIN WAX COMPOSITION, characterized by improved plastic flow and higher melting point than that of ordinary paraffin wax. The wax may be sprayed in very finely divided form onto signatures and the like as they are delivered from the printing press for the purpose of providing a slightly roughened surface on the printed paper as it is stacked, to prevent smearing of the ink and to facilitate the evaporation of the solvents used in the ink. Example of compositions: Paraffin wax (M. P. 125°F.-127°F.) 92.5 parts; Stearanilide 5.0 parts; Petroleum resin 2.5 parts. The melting point of the end product is 170-180°F. Invented by Mead Cornell, Cleveland, Ohio. Assigned to The Cornell Machine Co., Cleveland, Ohio. Application August 12, 1938. 11 claims.

2,299,628. METHOD OF FORMING A SUPPORT FOR A STENCIL by the steps of securing a sheet of elastic material, such as silk, upon a frame, placing a screen on the sheet of elastic material, placing strips of elastic material upon all the marginal portions of the screen, including the sides, bonding the strips and the sheet to the marginal portions of the screen with an adhesive and then applying pressure thereto so as to force the elastic and bonding material into the interstices of the screen and then removing a portion of the sheet of material, lying over the screen. Invented by Lyman H. Johnson and Paul S. Johnson, Los Angeles, Calif. Unassigned. Application July 19, 1940. 7 claims.

Plate Making:

2,297,635. STEREOTYPE MAT, adapted to receive a deep, sharp and clear-cut impression from the mold with a minimum of fracture. When the molten metal is poured against the mat, its flexibility is such that it flattens itself readily against the supporting surface under the weight of the cast metal, thus correcting any irregularities of its shape due to warping which may have occurred in the operations preceding the casting. Invention is based on the discovery that if lignin, obtained from a natural lignocellulosic material is intimately mixed with cellulose fibers, such as rag stock, cotton linters and the like, the plasticity of the resulting mat is increased, both when cold and when at elevated temperatures, and the flexibility at elevated temperatures is also increased. Invented by Arlie W. Schorger, Madison, Wis. Assigned to Burgess Cellulose Co., Freeport, Ill. Application August 26, 1939. 15 claims.

2,297,684. TOOL FOR SCRIBING LINES in the emulsion on the surface of films used in making contact impressions on zinc plates for photo-lithographic or photo-offset printing, or for scribing lines in the zinc plate itself. The tool is provided with a fixed gauge for forming lines of predetermined width and it can form double or triple lines if desired. It is claimed to make smooth lines with no ragged edges so that the reproductions of perfect lines will result. Invented by Gordon W. Bratcher and Jarl W. Hanson, Duluth, Minn. Unassigned. May 23rd, 1941. 3 claims.

(Continued on Page 30)

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2,297,691. ELECTROPHOTOGRAPHY which involves the use of materials such as sulfur, anthracene, anthraquinone, etc., which are insulators in the dark but which become partial conductors when illuminated. These materials respond to light, being slightly conductive when they are illuminated and again becoming insulating when the light is cut off. These photoconductive insulating materials are used to control electric charges in such a way as to produce an electrcstatic latent image. The electrostatic latent image is then developed to make a visible picture. The principle of the present process may be used for producing typographical printing cuts or relief printing. This can be accomplished by producing a photoconductive insulating layer of anthracene or anthraquinone on a block of metal such as zinc or copper, exposing and dusting with resin powder to form the image in mirror-reverse, heating to drive off the anthracene (or anthraquinone) and melting the resin onto the metal surface, cooling and then etching the plate in acid to etch away the metal not covered by the resin and thereby leave the image in raised relief. The cut thus produced can be used for printing in the usual way. Invented by Chester F. Carlson, Jackson Heights, N. Y. Unassigned. Application April 4, 1939. 27 claims.

2,297, 739. STEREOTYPE CASTING BOX for casting tubular stereotype plates, in which novel vacuum means are employed in both the drag and the cope to hold the mat against the walls in order to assure a truly cylindrical printing surface on the cylindrical plate formed in the casting box, regardless of the initial stiffness of certain portions of the mat. The mat may be arranged in position easily before closing the cope and when the cope is closed, vacuum is applied to hold the mat in its desired position for casting. Invented by James L. Blackley, Battle Creek, Mich. Assigned to Duplex Printing Press Co., Battle Creek, Mich. Application September 22, 1939. 8 claims.

2,297,929. TREATMENT OF METAL SURFACES IN LITHOGRAPHY, so as to make them more receptive to the application of ink. Invention comprises treating the metal surface with an oleophilogenic compcund, i.e., a compound having a long chain aliphatic group and containing a polar salt-forming group, followed by the application of the ink, *e.g.* non aqueous oleaginous ink such as an ordinary lithographic ink. Invented by Leonard G. Wise, Wilmington, Del. Assigned to E. I. du Pont de Nemours & Co., Wilmington, Del. Application May 13, 1939. 17 claims.

2,297,932. METHOD OF PRODUCING LITHOGRAPHIC PRINTING PLATES with surfacing which presents advantages over such substances as albumen, gum arabic, dextrine, etc., previously used. For example, a solution comprising about 10% of arabogalactan and about 3% of ammonium bichromate in water is applied to a lithographic plate and the sensitized coating is allowed to dry. The plate is exposed to a light image in the usual way and developing ink is then applied and the unexposed portions are removed with water, leaving the hardened exposed portions of the arabogalactan coating on the plate in ink-receptive condition. The developed plate is then treated with a de-sensitizing solution of usual composition, for rendering the non-printing areas ink-repellant and water-receptive. The plate may then be put on the press for printing. Such a plate comprises printing areas formed of arabogalactan hardened by light action. Invented by William H. Wood, Bedford, Ohio. Assigned to Harris-Seybold-Potter Co., Cleveland, Ohio. Application August 31, 1940. 8 claims.

2,298,666. METHOD AND APPARATUS FOR PREPARING COPY by photographic processes for photo-offset or photo-lithographic presses, from type stencils. The apparatus is characterized by variable spacing between adjacent letters or symbols in accordance with the width of the reproduced letters and symbols. Invention provides a photographic apparatus in which various fonts or cases of type are prepared on stencils, each stencil including a series of type characters and spacing marks individual to the several characters for determining the spacing between adjacent characters in the copy. A printing apparatus is provided including a rotatable drum, carrying a transparent stencil of the characters to be printed, a key controlled mechanism for selecting the characters to be printed in succession on a record sheet or strip by a photographic process and a photo-electric system for controlling the spacing of adjacent printed characters. Invented by Robert N. S. Whitelaw, Charleston, S. Car. Unassigned. Application April 19, 1940. 8 claims.

Printing Presses and Equipment:

2,297,005. IMPROVED DRIVE FOR INKING MECHANISM of a high speed rotary relief printing press, employing stereotype or other relief plates, whereby the normal irregularities in the speed of running the printing couple will not be transmitted to the inking mechanism. Object is to reduce the strain and breakage of gears and to provide a more uniform distribution of ink on the form rollers. The drives of the printing couple and ink drum are interconnected by means of at least one resilient power transmitting element. Preferably the ink drum is gear-driven from the printing couple with at least one of the gears formed of resilient material or including resilient material so positioned that it is compressed by the power which it transmits, thus absorbing irregularities in speed. Invented by Stanley D. Livingston, Freeport, N. Y. Unassigned. Application November 2, 1939. 1 claim.

2,297,314. APPARATUS FOR DRYING WEB MATERIALS such as freshly printed paper, which utilizes relatively high temperatures, but which insures against scorching or similar damage to such materials. The drying system of the invention employs gas burners or the like within an insulated drying hood, through which the material to be dried is passed. The flames from the burners heat to a relatively high temperature air which is passed to the web material for contact therewith, the flames themselves being out of contact with the material. In this way the temperature of the drying air supplied to the web material may be raised to 1500°F. or higher, if desired. This hot air, supplied to the material at a suitably high velocity, sweeps the vapors from the material and thus brings about rapid drying. Invented by Bernard Offen, Chicago, Ill. Unassigned. Application March 4, 1939. 6 claims.

2,297,846. METHOD AND APPARATUS FOR PRODUCING A COMPOSITE PICTURE, suitable for use in the production of stereograms, which utilizes an offset printing operation for the continuous repeated production cf a composite view from two printing plates with stereoscopically related pictures. Means associated therewith create and apply to each individual stereograph a lenticulated resolving film, by means of which the view may be resolved into a number of right and left stereographic image portions, visible independently by the right and left eye of an observer to produce the illusion of depth. Invented by William H. van Benschoten, Washington, D. C. Unassigned. Application October 4, 1940. 18 claims.

2,298,094. MULTICOLOR WEB PRINTING MACHINE INCORPORATING A FOLDER and a number of units in line, certain of the units being standard perfecting units and others being standard perfecting units provided with additional color printing cylinders. The arrangement affords maximum operating and web run flexibility, so that any selected web may be run through any selected printing couple or printing unit, or any combination thereof, and then the printed web may be run directly to the formers of the folder, without passing through a circuitous path and without passing under the folder. The arrangement preferably provides for an odd number of units and a folder in a line, with certain of the units being located at one side of the folder and others at the opposite side. The units at one side of the folder are so arranged that a standard perfecting unit is positioned immediately adjacent the folder and a three-impression unit is positioned immediately adjacent the standard unit at a location away from the folder. On the opposite side of the folder, the units are reversed. At this side of the former, the arrangement is preferably repeated so that the units are arranged in pairs, each pair including a three-impression printing unit and a standard perfecting printing unit. Invented by Arthur Dressel, Hollis, N. Y. Assigned to R. Hoe & Co., Inc., New York, N. Y. Application March 6, 1941. 16 claims.

2,298,803. METHOD OF RAPIDLY DRYING PRINTED MATTER, wherein the surface of the paper is subjected to the action of superheated steam at a temperature so regulated with relation tc the speed of movement of the paper, that the temperature to which the surface of the paper is raised by the superheated steam is above that of the boiling point of the volatile constituents of the printing ink but below that at which the paper can be damaged, so that the volatile constituents are evaporated in a very short time. In multiple printing, for example, the print from one impression cylinder will be completely dry before the next impression cylinder is reached. One advantage of this method is that the necessity for a totally enclosed ink fountain is eliminated since it is unnecessary to use the highly volatile and toxic solvents. Further, printing at varying speeds may be carried out with the same ink, and it is unnecessary to use several inks varying in volatility with the speed of work, for tuning up at the beginning of a run. Invented by Herbert N. Norris, London, England. Unassigned. Application February 8, 1938. 11 claims.

2,299,259. IMPROVED AIR BLAST NOZZLE for the sheet delivery mechanism of a printing press, constructed so that the width of the blast ejected therefrom is sharply defined, so as to strike the sheet along a narrow continuous linear area in order that the sheets shall be deposited onto the delivery table in a perfectly flat condition. The new nozzle is said to overcome the difficulties of previous nozzles, where the blast was directed onto the middle portion of the sheet or transversely to the direction of travel, causing the corners of the sheet to curl up as it floated down onto the delivery table, particularly with light stock, such as onion skin. Invented by Benjamin L. Sites, Chicago, Ill. Assigned to Miehle Printing Press & Mfg. Co., Chicago, Ill. Application September 9, 1940. 13 claims.

2,299,289. PRINTING PRESS GAUGE PIN which will quickly and securely grip the tympan sheet with which it is associated by means first of lock cleats which are die cut and stamped in the pin stock as a part of a single arm unit, secondly by pressure created between parallel arms and prongs and thirdly by metal teeth which remain in position without the use of glue or auxiliary devices. The gauge pin is provided with an adjustable tongue which will hold either light weight or heavy weight paper stock in close proximity to the tympan sheet, thereby preventing curling of the edges of the paper stock. Invented by Charles D. Winders, Salina, Kans. Unassigned. Application March 25, 1940. 4 claims.

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New England Executives

(Continued from Page 26)

those little toadstools rip the mat surface. The stereotypers contended they use no more pressure than is necessary in order to obtain good results over the entire page and that if the engravers attempted to get too much of a pin point dot, there is nothing there to stand up. "Even under direct pressure they would go down," observed one stereotyper.

Press Room

Chairmanned by John J. Stubbs, foreman of the Press Room at the Fall River *Herald-News*. Four ten-minute talks were given at the start of the clinic all relating to problems to be faced by pressmen during the war. Speakers were: William Brown, American Wringer Co., *Care of Rubber Rollers, Rubber Substitutes and Composition of Rubber.* Edward J. Shattuck, Geo. H. Morrill Ink Co., *Grade of Ink for Variable Press Speed and Substitution for Methyl Violet in Inks.* William Grenier, New England Newspaper Supply Co., *Care of Blankets, Substitutes for Cork and Wool Blankets.* Joseph Addison, Press Supt., Hartford (Conn.) *Times, The Importance of the Pressroom in Getting Out a Newspaper.*

The first question asked was *Is it economical just to replace the top blanket if the bottom blanket is in good condition?* Mr. Finck of Vulcan Proofing Co., answered that underpackings could be used if they guaged properly. Joseph Addison of the Hartford (Conn.) *Times*, thinks many pressroom men have tried to be too economical with blankets and that in many cases they left the bottom one on or reversed it if possible. He did not agree it was just the thing to do if one wanted the best printing results.

In answer to the question whether any great difference had been noted in newspaper printing since toner was discontinued, no one present could say that they had, or that they had encountered any great difficulty in producing a good looking sheet.

The next question was: "We are having trouble with our color ink packing on the plates. What causes this?" Mr. Shattuck of the George H. Morrill Co., expressed the opinion that the ink has too much tack. Some times proofs are pulled on heavy stock and the pressmen are expected to reproduce the exact colors on newsprint. This does not give the pressmen a fair deal. He stressed that all proofs should be pulled on newsprint.

The question of the length of the life of rubber rollers brought several answers, many stating they had been using them for 17 and 18 years.

Only one paper reported keeping accurate records on the amount of ink used. Mr. Addison reported he used about 2½ lbs. for 5000 8-page papers.

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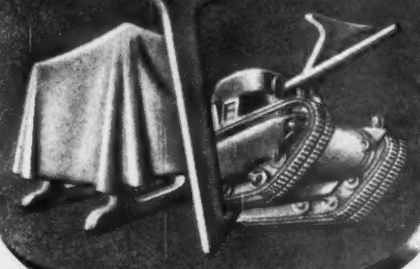

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The significance of the slogan "Machinery Builders Since '82" also means a lot to Uncle Sam. Sixty years of pioneering and producing precision machinery for you is the background that is now converted 100% to the production of precision machine tools for war plants.

Our greatly enlarged plant and personnel facilities that are now serving Uncle Sam will be available to serve you again when the war is won.

HAMMOND GLIDER AND MERCURY TRIMOSAWS, EASYKASTERS AND ROUTERS

Hammond Machinery Builders INC.

1604 DOUGLAS AVENUE

KALAMAZOO • MICHIGAN

EASTERN BRANCH 71 W. 23rd STREET, NEW YORK CITY

Additional Notes

(Illinois Mechanical Conference)

(Deferred from the October issue report of the Sept. 26-27 Illinois Newspaper Mechanical Conference, held in Peoria.)

COMPOSING Room Clinic—The consensus of opinion in the discussion whether electric metal pots on line-composing machines should be turned off during non-working hours or left on continuously, was that the biggest saving would be in the replacement cost of heating elements where the pots are maintained in a continuous operating condition.

Printable space conservation was discussed by executives present at the clinic. It was announced that the Bloomington (Ill.) *Pantagraph* datelines have been reduced from 12 pt. to 8 pt., and to 2 col. width, instead of extending across the 8 col. page. As a result, 1½ in. more of news matter is carried on each page.

It was also announced that one Illinois paper has revised its proof and proof-delivery methods. Advertising copy must be in by the deadline for a given edition or no proof will be delivered to the advertiser. In the case of an advertisement of a transient nature no proof is delivered unless the advertisement measures 12 in.

Stereotype Department — Inquiry was made as to the cause of mats sticking to stereotype plates in a vacuum casting box. It was reported that because of its great drawing power, excess vacuum would fracture the mat surface. It was suggested that the inquirer lower the vacuum pull to prevent peeling of the mat. One company recommends that the vacuum be set about 12 in. on boxes of its manufacture.

One stereotype executive reported uneven heating in a centrifugal scorcher which caused the burning of mats in spots—brown on top but not at the bottom of the mat. The column rules are inclined to buckle. It was suggested that the heating elements be rung out to see if they are heating properly. It has been found that after they have been brought to capacity load some elements will only heat up to a certain temperature and then will start cooling off.

At left — Pressroom Superintendent Howard Colton of the Bloomington (Ill.) **Pantagraph** was elected president, and Don Shelley of the East St. Louis (Ill.) **Journal**, was elected vice president of the Illinois Newspaper Mechanical Conference at its recent meeting held in Peoria, Ill.

Stereotyper Gibson of the Chicago *American* discussed a solid plastic base which he is using under cuts for molding purposes.

As a cork molding blanket conservation measure, some stereotypers are using a 0.090 in. creeper and a fibre board with an old cork on top.

During the discussion about rematting all cuts kept in newspaper libraries so as to release the zinc metal to the scrap pile, it was stated by one executive that his firm had tried it, but it was found that the mats took up more storage space than the zinc cuts from which the mats were molded. Since the firm was not able to buy additional steel filing cabinets, the editor went through the files and discarded all cuts which he believed to have no further use. In this way, additional storage space was secured besides turning in quite a bit of zinc to the industry.

Matched Stationery

A valuable book on Matched Stationery has been announced by the Gilbert Paper Company, Menasha, Wis. This book covers the advantages of Matched Stationery including press run economies, demonstrated by tipped-in actual press run sheets ranging in size from 17 x 22 to 28 x 34. The smallest sheet, for instance, shows the efficient layout of letterhead, envelope, invoice and statement, all bearing the same letterhead design to produce a matched, harmonious effect. Different combinations are shown on the other form sheets. Copies of the book can be secured from any Gilbert merchant, or from the Gilbert Paper Company, Menasha, Wisconsin.

TECHNICAL LITERATURE

Production and Mechanical Executives wishing to secure copies of the literature described below may do so by addressing the manufacturer direct, or by sending request to Printing Equipment Engineer. *We'll be glad to pass your request on to the manufacturer. Literature is gratis except where noted.*

What Ideal War Work Means To the Printer

Ideal Roller & Mfg. Co. is distributing to the trade a four page folder bearing the title: *What Ideal War Work Means To the Printer.* In the folder it is stated: "We want you to remember that while we, like all other responsible organizations, are eager to do everything we can in the interests of victory, we are roller-makers at heart and will return wholeheartedly to that occupation as quickly as possible." In the folder, Ideal explains its present position with respect to important war manufacturing work.

A Guide to Better Bearing Lubrication is being distributed by SKF Industries, Inc., Philadelphia manufacturers of ball and roller bearings. Thirty-two pages are filled with designs, formulae, and graphs which explain the highly technical text. Subjects treated include the functions of lubrication, oil lubrication, recommended viscosities, oil supply systems, oil bath, circulating systems, spray or mist lubrication, wick feed, oil with compressed air, grease lubrication, how grease lubricates, ABEC grease standard, operating conditions, greasing intervals, grease supply systems, housing with grease fittings, housings without grease fittings, grease chamber lubrication, comparative advantages of oil and grease, high-temperature applications, minimum friction applications, protection against moisture, protection of idle machinery, cleaning.

Latin-American Essay Contest

IN cooperation with the National Graphic Arts Education Association, International Printing Ink Corporation announces the selection of prize winners in the first Essay Contest, conducted among Latin-American high schools. Title of the essay was "Printing and American Defense." Adalsinda Fernandez, an 18-year-old high school student from Arabos, Matanzas, Cuba, is the first prize winner. The first prize was to have been a trip to the United States, but because of world conditions, Miss Fernandez will be given her choice of a trip or a cash prize. She is the daughter of a Cuban mining engineer, and attends the Spanish-American School of Matanzas, where she also tutors in English.

Second prize was awarded to Jose Angel Conchello D., second year law student at the University of Nuevo Leon, Monterrey, Mexico. Seven winners were selected by the judges.

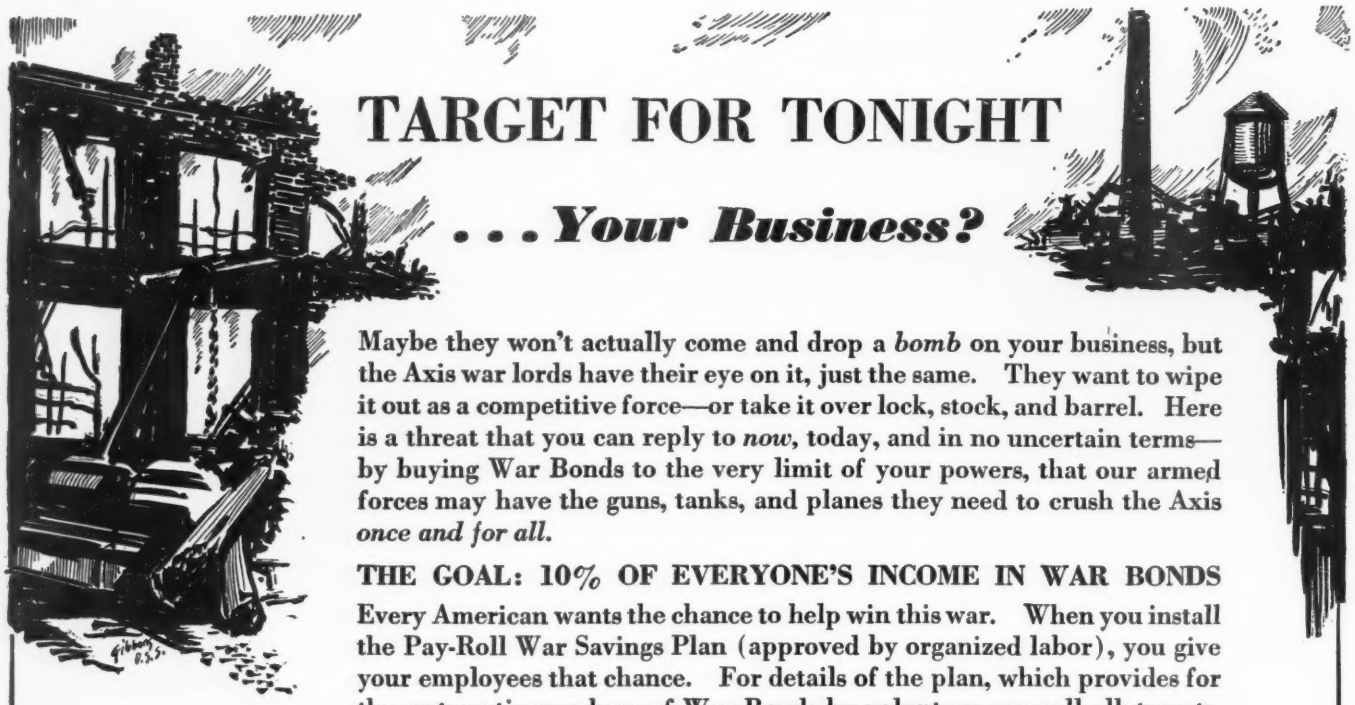
The judging board consisted of Vice President Harry L. Gage of Mergenthaler Linotype Co., chairman; Wm. L. Chenery, editor of *Colliers;* Don Francisco, head of the Radio Div., Office of the Coordinator of Inter - American Affairs; Henry R. Luce, editor of *Time* and *Life;* and De Witt Wallace, editor of the *Reader's Digest.*

Plans are now being formulated for next year's contest. The title for this contest will be "Printing and Economic Freedom in the Americas," and it will again be conducted with the full cooperation of the National Graphic Arts Education Association, under the personal auspices of Fred G. Hartman, executive secretary.

Commemorative Booklet

As a special project of interest to the printing industry, the Printing Department of the Washburne Trade School, Chicago, recently set, printed, and bound a handsome 47-page booklet, entitled *Commemoration of the Achievement of Johann Gutenberg.* This booklet records the proceedings of a dinner meeting, which was sponsored by the Chicago Club of Printing House Craftsmen in co-operation with sixty-nine other Graphic Arts organizations, in Chicago on October 1, 1940, to signalize the 500th anniversary of the invention of printing. The text of the booklet was edited by Douglas C. McMurtrie.

The booklet of proceedings was set in Linotype Fairfield and Ludlow Eusebius and printed by students in Washburne's printing department under the direction of John G. Henderson, on Strathmore Text White Laid and bound in Strathmore Cover Sand Buff Antique.



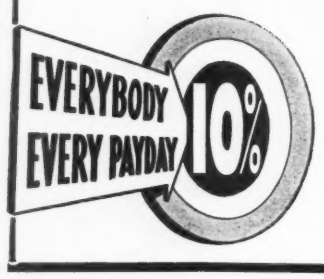
TARGET FOR TONIGHT

. . . Your Business?

Maybe they won't actually come and drop a *bomb* on your business, but the Axis war lords have their eye on it, just the same. They want to wipe it out as a competitive force—or take it over lock, stock, and barrel. Here is a threat that you can reply to *now*, today, and in no uncertain terms—by buying War Bonds to the very limit of your powers, that our armed forces may have the guns, tanks, and planes they need to crush the Axis *once and for all.*

THE GOAL: 10% OF EVERYONE'S INCOME IN WAR BONDS

Every American wants the chance to help win this war. When you install the Pay-Roll War Savings Plan (approved by organized labor), you give your employees that chance. For details of the plan, which provides for the systematic purchase of War Bonds by voluntary pay-roll allotments, write: Treasury Department, Section S, 709 12th St. NW., Washington, D. C.



Buy War Savings Bonds

This space is a contribution to America's All-Out War Program by

PRINTING EQUIPMENT ENGINEER

The Kid knows his Don'ts in NUMBERING FOR PROFIT

● "I've been reading up on Don'ts, Pop."

★ "What kind of Don'ts?"

● "Numbering machine Don'ts."

★ "Well let's have 'em."

● "Don't fail to clean your machines regularly. Don't fail to lubricate with a light, non-gummy oil. Don't turn the figure wheels with any steel or hard metal article. Don't use soft packing."

★ "You're learning fast but you forgot one important Don't."

● "What's that?"

★ "Don't forget to invest at least 10% of your salary in war bonds."

● "That's regular with me."

WELLER NUMBERING MACHINE CO.
ATLANTIC AVE. & LOGAN ST., BROOKLYN, N. Y.
Sold by all dealers and branches
AMERICAN TYPE FOUNDERS

3069

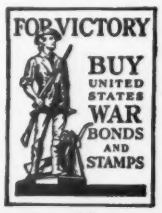
CHALLENGE MEETS CHALLENGE

★ Everything we have and hold dear has been challenged! Our foes believe they can crush us before we can produce enough planes, tanks, guns, and ships to stop them.

American industry has accepted this challenge; and as one cog in a mighty machine, The Challenge Machinery Company is going full tilt to supply precision equipment needed by builders of aircraft, ordnance, and other war materiel.

That must come first! But it cannot black-out a half-century of business relations in the graphic arts field.

For the duration, Challenge will do everything possible to maintain its service to customers and dealers—to furnish necessary replacement parts—and to deliver essential equipment to American printers, publishers, typesetters, and binders. All emergencies will be met as quickly and completely as conditions will permit. Meanwhile, engineering development will continue to devise improved products for the future.



423

THE CHALLENGE MACHINERY CO.

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Challenge

Eastern Sales Office:
50 Church Street, NEW YORK

MAKE NO MISTAKE

ABOUT

SAW TRIMMERS

Where efficient production under pressure is necessary, you will find C&G No. 3-A Saw Trimmers.

Because of many exclusive features, C&G No. 3-A Saw Trimmers are recognized for safety, accuracy, and speedy operation. When replacements are being made, be sure to specify C&G No. 3-A Saw Trimmers.

Write for the full facts

MILWAUKEE SAW TRIMMER CORP.
610 EAST CLYBOURN STREET, MILWAUKEE, WISCONSIN

EXECUTIVE ¶s

H. R. Capps, chief machinist of the *Florida Times-Union*, Jacksonville, Fla., has recovered from an accident suffered during the summer in which five ribs were broken. At the time, he was attending the Presbyterian General Assembly in Knoxville, Tenn., as commissioner. His son, Hervey, jr., formerly with Intertype Corporation, took care of the *Times-Union* battery of composing machines during his father's indisposition.

Intertype Corporation announces the promotion of Dr. William J. Dunne to the office of assistant secretary of the corporation.

A native New Yorker, Dr. Dunne joined the corporation as a clerk in 1919.

Native New Yorker, Dr. W. J. Dunne is now assistant secretary of Intertype Corporation.

He was appointed manager of the credit department in 1928. He attended New York University and holds the degrees of A.B. and J.D.

Gordon Elrod, who has been serving the Ludlow Typograph Company as its Southern District Manager with offices in Atlanta, Ga., resigned that position on September 28. Mr. Elrod has accepted an appointment to the Smaller War Plants Div., WPB, as Chief of Army Procurement for SWPD, with offices in the Raleigh Hotel, Washington, D. C. Mr. Elrod is well and favorably known as a newspaper mechanical department production executive throughout the country.

First Lieutenant John L. Kronenberg, formerly Graphic Arts engineer with the S. D. Warren Company, Boston, and Second Lieutenant Norman T. Power, formerly assistant manager of the Western Division of the Stecher-Traung Lithograph Corporation, San Francisco, are now with the engineers in the Army Map Service Plant in Washington, D. C. Prior to his connection with the S. D. Warren Company, Lieutenant Kronenberg was associated for several years with the U. S. Printing and Lithograph Company.

Periodic Checkup OKs Non-Offset Spray Materials

Graphic Arts Spray Manufacturers, a group associated with New York Employing Printers Association, again has had analyses made of the non-offset spray materials of manufacturers represented in the group, as a periodic check-up on the maintenance of standards set up by the group for its members' products.

The result of these analyses it is announced by the group, has been favorable and all of the member manufacturers, as follows, have been authorized to continue their use of the group's approval label on their products: Beach Nonpareil Compounds, Inc.; Binks Mfg. Co., Inc., (American Type Founders Sales Corp., Agent); Craig Corporation; Delany & Co., Inc.; Nu-Method Sales Corporation; Oxy-Dry Sprayer Corp.; Paisley Products, Inc.; H. Strump Products Co.; Triangle Ink & Color Co., Inc.

Through its periodic checks the group endeavors to maintain products for use in non-offset spray guns that are free of harmful ingredients. They must measure up to standards which should keep the products free of health hazards, in the opinion of expert medical authority.

The standards set up by the group require that all dextrine and starches be of an edible grade and other ingredients of U.S.P. quality.

This check-up is the continuation of the plan set up last year in the survey made under the joint supervision of the local and International pressmen's unions, New York Employing Printers Association, Inc. and Graphic Arts Spray Manufacturers, through the cooperation of Industrial Health Section, Metropolitan Life Insurance Co.

Conservation Curtailment Concentration

(Continued from Page 16)

1941, America consumed over 20 million tons of fibre in the form of paper and paper boards. That was almost exactly 3 million tons more than we consumed in 1940, and 4 million tons more than the consumption of 1939; in 1929 our consumption was 13½ million tons in round figures. Of this huge consumption of fiber, drawn largely from the virgin forests of the nation, in 1941, a little under 7½ million tons went into cultural uses; nearly 4 million tons appeared in newsprint (of which some 82% was drawn from Canada), writing paper accounted for 720,000 tons, book paper (free from groundwood sheets used for all forms of magazines, book and miscellaneous printing) required 2 million tons, while groundwood stocks made up the remaining 628,000 tons.

"The remaining 13 million tons of the remaining consumption went into wrapping and bag, tissue, absorbent, building and other papers, and into boards.

"In surveying the situation, it is interesting to note that in the jump from 1929 to 1939, cultural papers lagged by 1.9% while mechanical stocks increased 36.1% or a total increase of 18.3%. In the rise in consumption from 1939 to 1941, cultural papers advanced 17.5% and mechanical stocks 30.2%, a total increase of 25.4%. Turning to the summary of the overall change from 1929 to 1941, the gross advance in use of cultural papers was 15.9%, while mechanical stock usage jumped to 77.1%, an average overall increase of 48.5%."

Help supply the ferrous scrap metals vitally needed for tanks, ships, guns, munitions and all armament.

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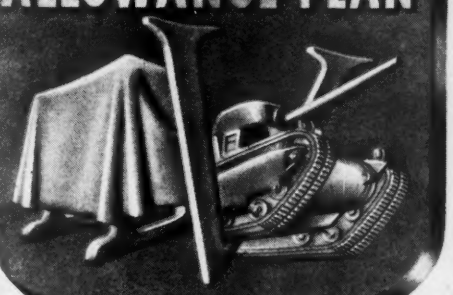
WARTIME SCRAP ALLOWANCE PLAN



FOR FULL DETAILS, WRITE
MILLER PRINTING MACHINERY CO.
PITTSBURGH, PA.

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Keen enjoyment of work
Smooth sailing with KIMBLES
Where no troubles lurk.

Motors by KIMBLE
Distributed by AMERICAN TYPE FOUNDERS
Branches and Sales Agents in 25 Cities

Paper Curtailment to 1940 Levels

Following the above quoted line of thought as expressed by Mr. Palmer in his Des Moines speech on Sept. 16, he addressed the annual convention of the National Association of Printing Ink Makers at Hershey, Pa., on September 17. At this convention he said that just at present there is no paper shortage, but there could be one, not because of material shortage but to an impending lack of manpower for the logging industry.

He said:

"It isn't a pleasant prospect, but candor requires the statement that the printing and publishing industry is face-up to the necessity for curtailing its consumption of paper and board, and of effecting that curtailment right soon. The Printing and Publishing Branch, facing the problem squarely, is convinced that the industry can stand a curtailment in its paper and board tonnage back to the levels of 1940 or even of 1939. A drop back from 20 million tons, as consumed in 1941, to the 17 million tons of 1940, or of the 16 million tons of 1939, should be possible and practicable, with little or no resultant hardship on the industry as a whole. Such a curtailment . . . should be imposed on an overall basis, with a careful weeding out of the obviously luxury or specialty products that are desirable but not actually necessary during strenuous war period, first."

He suggested to the Graphic Arts that one way to save tonnage is to use lighter weight papers and concluded by stating: "Do it first before it is done for you."

Manpower Demands To Be Satisfied from Civilian Ranks

In discussing manpower during his Hershey, Pa., address, Mr. Palmer said:

"The incessant drag of the selective service on the virile manpower in the logging camps, plus the urge of the shipyards and munitions plants with their higher wage scales, has made a serious inroad upon the manpower available in the woods for turning out timber, lumber and pulpwood. And the end is not yet in sight. Right at this moment there is an urgent demand for 60,000 additional men in the states of Oregon and Washington alone, to man the augmented facilities of the shipyards, airplane plants and munitions producers. Where are these men to come from? Only one source—from the ranks of civilian industry, and the nearer to the area in which they are needed the better. Here we have the first real coming-to-grips with the problem of concentration in industry that America has had to face in an industry upon which the graphic arts depends for their life-line of paper and board.

"The future holds out no hope for an immediate, or even a remotely early, improvement. The current estimates of required manpower for war purposes in 1942 (with less than four months to go) are:

For the armed forces	3.4	million
For additional war work..	10.6	"
Total.....	14.0	"

These 14 million of manpower are expected to come from:

Non-war industry.....	8.6	million
Agriculture	.4	"
Self-employed	.3	"
Unemployed	1.4	"
Net increase in labor force.	3.3	"
Total.....	14.0	"

"In 1943 there is an additional manpower requirement of 6 million of which the armed forces will take 3.5 million and war industries 2.5 million. These men must come from the very same sources, with the accent on non-war industry, to the tune of 1.4 million, and a net increase in the labor force of 3.6 million."

Conservation Illustrated

Reverting to the Des Moines speech again, Mr. Palmer indicated plainly that

Elrod

produces economically leads, slugs, rule, base of the highest quality.

Ludlow Typograph Co.
2032 Clybourn Avenue • Chicago, Ill.

EASTERN NEWSPAPER SUPPLY
9607 34th AVE., CORONA, N. Y.
EVERYTHING FOR THE STEREOTYPER
THE NEW "FLECTO" GUMMED BACKING FELT—IN SHEETS OR ANY SIZE STRIP
Medium and hard cork molding blankets • Felt and wool molding blankets • Creepers • Dryers • Molding boards • Matrix sealing tape • Royle high speed router bits • Router belts • Circular Saws • Buck chisels • Twist drills • Jig saws • Tail boards • Flat casting boards • Wire woven and plain asbestos scorcher covers
WRITE FOR SAMPLES AND NEW CATALOG TODAY

real conservation and curtailment of materials are in the offing. He said: "Every publisher and printer, regardless of the type of publication or product involved, *can* and *should* start immediately to plan and institute the utmost conservation and curtailment in the consumption of paper and of the many materials employed by this industry in the production of its endless variety of products. Already, several of the magazine producers have felt the impeding hand of labor shortage in their own or their producers' plants. One such publisher told us . . . his firm had been obliged to redesign the type pages of one of its weekly publications to save the printing of an 8 page section per week; the saving in press hours spelled the difference between meeting the deadline of publication each week, or missing it. They had found it possible, by changing the type face used, enlarging the type page, reducing margins, omitting bleed-type illustrations, conserving every pica of blank space on a page, to increase the type content per page by 17%. If one applies that ratio of conservation to a 64-page publication, printed in eights, it immediately offers the same content in a 56-page publication formerly requiring 64 pages."

Voluntary Curtailment

It seems that the industry, with respect to curtailment, is being given an opportunity to see what it can do on a voluntary basis by way of holding down on the use of critical metals. Mr. Palmer stated that unless there is immediate and generous conservation throughout the industry with respect to copper and zinc, there can be but one result—a mandatory order restricting the employment of more than one-color printing on a really drastic basis.

In explaining the need for voluntary curtailment, he said: "Much concern has been evinced in conservation quarters over the continued lavish use of multi-color illustrations in supplements to newspapers, in comic strips and books, in magazines and books, and in the myriad of commercial-printed products. Publishers would do well to institute immediate curtailment of new uses of multi-color printing in publications, particularly the employment of lavish bleed-type illustrations, and the also extravagant expanse of color so prevalent in magazines, books and commercial advertising today."

Release No. 7

(Continued from Page 2)

panic decisions in an effort to anticipate the possible inventory limitation. No regulation actually limiting merchants' inventories is contemplated to take effect in 1942; although quarterly inventory and sales reports soon will be instituted for merchants whose total sales for a specified twelve-month period amounted to $100,000 or more, and whose inventory at the end of that period amounted to $25,000 or more at cost value. (WPB Release 1802.)

LOOSE-LEAF METAL PARTS AND UNITS: A question-and-answer statement on the use of iron and steel in books and binders under Order L-188 was issued on October 5, 1942. As previously announced, control over loose-leaf items has been transferred from Order M-126 to Order L-188. All mechanical bindings using iron and steel (such as Spiral, Cercla; etc.) continue to be covered by the Iron and Steel Conservation Order M-126. (WPB Release No. T-956.)

NICKEL: Allocation control over nickel has been tightened further in a revision of Order M-6-b. It is increasingly important that non-war industry conserve nickel to the last ounce. (WPB Release T-946.)

NITRIC ACID: Engravers will be able to obtain their normal requirements during the month of October. The need for conserving nitric acid continues to be great, and solutions should not be disposed of until their entire usefulness has disappeared. No statement is available now regarding November supplies, since the demand for nitric acid for making explosives for war purposes is on the increase.

OBSOLETE PLATES: Effective October 1, 1942, persons who own obsolete plates as defined in Order M-99 are prohibited from acquiring new plates, or metal for conversion into plates, and from using or causing to be used any plates or restricted metals in any printing process. Printers and publishers who obtain new metal or plates or who use or cause to be used any plates or restricted metals must certify on their purchase orders that they do not have in their possession any obsolete plates.

In response to numerous inquiries as to the effect of this Order, an explanation in the form of questions and answers was issued as WPB Release No. 1886. Any person in doubt as to the status of plates under the Order should secure a copy of the question and answer release. It should particularly be noted that the Order requires re-analysis of all plates to determine if they are "obsolete" as of the first day of each calendar quarter. (WPB Release No. 1886.)

OPA PRICE CONTROLS AND FINANCIAL REPORTS: Maximum Price Regulation No. 225, setting up price controls for many printed and printed paper commodities, became effective September 29, 1942. The regulation lists approximately 175 standard and semi-standard printed products and places a ceiling, at March levels, on the sales of these articles and on printing services used in producing them.

Articles and services covered by the new regulation are, however, exempt from all price control when sold by printers whose total gross sales in 1941 of all printing and printed paper products were $20,000 or less.

Also exempted under Amendment No. 28 to Supplementary Regulation No. 1 and Amendment No. 3 to Revised Supplementary Regulation No. 11 are certain listed

DUPLEX PRESSES
Semi-Cylindrical • Unitubular
Tubular • High Speed Flat Bed
Flat Bed • Stereo Machinery
The Duplex Printing Press Co.
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RICHARDS Saws SINCE 1910
"MULTIFORM"
"ELECTROMATIC"
"DOMORE" "CLIPPER"
SAWS — ROUTERS — DIES
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INVESTIGATE
Cushman Flat and Curved Plate Routers *and*
Cushman Offset motors for Line-casting machines
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PAPER JOGGERS

Speed up the Job
Cut Labor Costs
Eliminate Effort

Made in 3 sizes

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TINGUE
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Stop Offset Trouble!

Send today for our new bulletin, "10 Ways to Avoid Offset." 14 pages of valuable hints for the pressman — how to improve presswork save money — by stopping Offset trouble.

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PRESS DRIVES
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Scrap idle, obsolete printing machinery for armament . . . under the

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WARTIME SCRAP ALLOWANCE PLAN

FOR FULL DETAILS, WRITE
MILLER PRINTING MACHINERY CO.
PITTSBURGH, PA.

End

CUTTING EDGE WORRIES!

Special alloy steel that holds a keen cutting edge . . . temper that doesn't draw under the heat of fast feeding . . . toughness that resists shock. Get these advantages by specifying SWW high speed knives.

SIMONDS WORDEN WHITE CO., Dayton, Ohio

S. W. W. KNIVES

100% *AUTOMATIC SLUG SAWING*

Odd-measure slugs sawed to any measure as ejected from line-casting machine. Fast — accurate — economical. Write for folder and prices.

MOHR LINO-SAW CO.
128 N. Union St. Chicago

MOHR SAW

$325 *GET THE FACTS!*

ON THE
NEW *Rouse* BAND SAW

H. B. ROUSE & COMPANY
2216 N. WAYNE AVE., CHICAGO, ILL.

printed paper products whose primary value depends upon their editorial content and which are intended for distribution to the public. Such articles include book, magazines, newspapers, catalogs, directories, programs, pamphlets, certain advertising matter, etc.

Among the standard products listed in the regulation and covered at all levels (except sales by printers with less than $20,000 volume in 1941) are bill books, cash books, business records, hotel registers, payroll books, guest registers, columnar pads, check books, receipt books, date books and diaries, telephone call pads, travelers' expense books, photograph albums, family budget books, baby books, looseleaf binders and fillers, Christmas Greeting cards, mottoes, souvenir post cards, printed birth and wedding announcements, pads of paper, stenographers' note books, commercial letter heads, meal tickets, commercial calendars, labels for canned, bottled or boxed goods, and legal forms. The list of these articles is contained in Appendix A (Section 1347.475) of the regulation. A few articles on which there may be no printing—such as paper pads and typewriter paper—are under control of this regulation because they are products or by-products of the industry or involve some operation common to the industry, such as binding. The few services rendered by printers in connection with paper products which are neither listed in the Regulation nor in the Amendments are also covered by this regulation.

For printers subject to the regulation, price ceilings must be determined by the highest price charged for the same or similar commodity or service which the printer sold in March, 1942. If he is unable to establish a price by this method, he must apply a formula using: (1) cost of materials figured at actual delivered net cost or at ceiling price, whichever is lower; (2) production charges based upon rates used in March, and (3) margin as used in March. (Releases OPA 748 and OPA 748A.)

Wholesalers and retailers reselling the listed commodities continue under the identical price controls of the General Maximum Price Regulation, which are re-stated in the new regulation.

"Every person supplying services or making original sales of articles for which maximum prices are established by Maximum Price Regulation No. 225 (except the persons engaged primarily in the publishing, printing, or allied businesses whose total gross sales in 1941 of printed paper and printing services were $50,000 or less) are required to file Form No. 325:1 in the Washington Office of OPA before November 28, 1942."

PAPER: The critical shortage of manpower in logging camps of certain areas, coupled with power shortages in some paper-making areas and an overall transportation shortage, makes necessary the elimination of non-essential use and waste of paper.

Inventory restrictions on paper again became applicable on October 1, 1942. During the Summer months these restrictions were lifted and consumers were permitted to build up inventories in order to relieve an anticipated fall transportation shortage. Paper now is subject to the Inventory Restrictions of paragraph 944.14 of Priorities Regulation No. 1.

PD-1A: Applicants under Form PD-1A will expedite the processing of their applications if they will supplement the required information with a letter giving their exact inventory and their consumption during the year 1941 and 1942 to date of the material requested.

PETROLEUM SOLVENTS: Complete allocation of aromatic petroleum solvents other than benzol and toluol was ordered to become effective starting October 1, 1942. This allocation control, under Order M-150, will not apply to users requiring 60 gallons or less a month. Applicants for allocation must apply on Form PD-600 by the 10th day of the month preceding the month for which allocation is requested. Other solvents available to ink manufacturers are expected to permit delivery of a satisfactory product to the gravure printer. (WPB Release T-786.)

The use of Toluol as a diluent for protective coatings, including gravure inks, is prohibited under Order M-34.

Benzol is controlled by Order M-137 and can be obtained only on specific authorization.

PRINTING INK: The market situation still is easy with no immediate sign of change.

Increasing war demands have made it necessary for WPB to bring naphthenates, used in printing inks and varnishes, under complete allocation in an amended Order M-142. The order also is changed to provide for the use of the standard chemical forms, PD-600 and PD-601, for the allocation of both naphthenates and naphthenic acid. (WPB Release T-847.)

PRP (PD-25A): The January-March 1943 PRP Application form has been sent to all members of the industry who have been reporting under PRP. These PD-25A applications for the first quarter of 1943 must be returned to the War Production Board by October 25, 1942.

SCRAP MACHINERY: Obsolete and inefficient machinery and equipment should be sent to the scrap-pile to insure full-time operation of steel plants. The printing industry is expected to pull its full load by scrapping all such machinery in its own plants.

SILVER NITRATE: Photoengravers and other manufacturers who require silver nitrate, and who encounter difficulty in securing reasonable quantities, should file application on Form PD-1A (or, if under PRP, on series PD-25 forms) with the Printing and Publishing Branch.

TEXTILES: Control over the distribution of soluble nitrocellulose, used in pyroxylin impregnated and coated book cloths, was established by WPB in Order M-196.

Pyroxylin impregnated and coated materials including the C-1 grade used in textbooks, are becoming increasingly hard to procure. (WPB Release T-683.)

Thomas Bancroft of Old Westbury, L. I., N. Y. has been appointed Chief of the Cotton Section of the Textile, Clothing and Leather Branch. J. M. Withrow of East Orange, N. J., has been made Chief of the new Carded Grey Goods Unit. (WPB Release T-729.)

TRANSPORTATION: General Order ODT No. 18, Revised, has been issued to become effective on November 1, 1942. Under the revised order's terms, railroads are prohibited from accepting for shipment any printed matter in freight cars not loaded either to full visible capacity, or to the marked weight capacity of the car.

Printers and publishers who cannot at all times meet the provisions of this order must make an individual appeal asking for authorization to load below the specified limits to meet specific needs or exceptional circumstances.

Where loading departs from the order's provisions, the shipper is required to endorse on the shipping instructions a certificate specifying the exceptions applicable to the shipment or the number of any special or general permit issued by the Director of the Division of Railway Transport. (ODT Release PM-4026.)

Some misunderstanding exists as to the amount of relief granted the Graphic Arts Industry under General Permit ODT No. 17-9, relating to truck deliveries. This Order permits three deliveries of certain unfinished products in any one calendar day. The relief granted applies only to services prior to the actual printing of sheets. This applies primarily to the sending of proof back and forth between compositor, author, publisher, agency and printer. Also, it affords relief in the picking up of forms for electrotyping, etc., but it does not include the delivery of supplies or any finished product. As examples of items which are not granted relief by this Order, ink would be interpreted as a supply and flat-printed sheets would be construed as a finished product. Such items may be picked up or delivered only once a day.

WIRE AND STRAPPING: The Containers Branch has advised that preference ratings for steel stitching wire in packaging will not be granted except for the most essential uses. Glues, and paper cornerlocks, in many cases can be substituted for metal stitching wire. (Release T-874.)

Tying Wire and Steel Strapping will be approved only in limited quantities and for uses which do not permit of substitution. Steel Strapping requirements of the Printing Industry must largely be met by re-use of material received on incoming skids. Book manufacturers who use wire for tying bundles of folded signatures, and all printers and publishers who use wire for tying bundles are advised to find substitutes immediately.

Stitching Wire is becoming more critical daily. Elimination of stitching or drastic reduction in the number of stitches in all printed products to the absolute minimum is required if this material is to continue to be used by the Printing Industry.

All applications for Stitching Wire, Tying Wire, and Steel Strapping must be accompanied by a letter setting forth (1) your consumption of this material during the year 1941, (2) consumption during the year 1942 up to the end of the last month for which records are complete, (3) existing inventory, (4) substitution and conservation practices introduced and in practice to reduce your demand for this material. If more than one size of stitching wire is used, the figures for all sizes must be given even when only one size is to be ordered.

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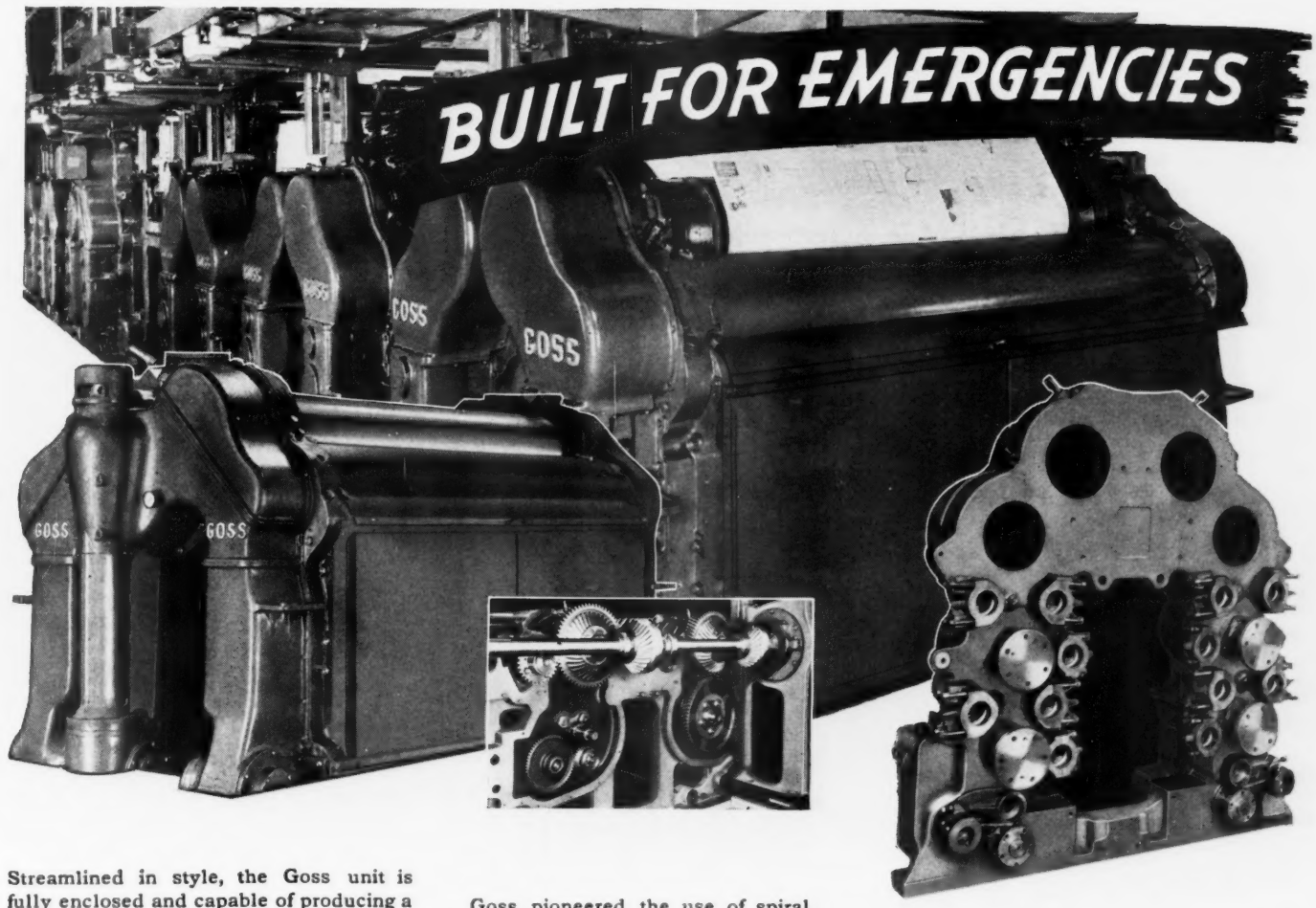
BUILT FOR EMERGENCIES



Streamlined in style, the Goss unit is fully enclosed and capable of producing a quality printed sheet on a clean web at maximum speed. Streamlining does away with all pipes and obstructions on the outside of the press. Lubrication is by means of a forced and gravity feed oil system. All gears and vibrating motion are entirely enclosed in oil-tight housings to insure proper lubrication.

Goss pioneered the use of spiral and helical tooth gears in press construction, because tests show that when properly mounted, these gears are 97-98% efficient, run more quietly, and have approximatly 30% greater strength than straight tooth gears of the same width face.

Unit frames are of semi-steel alloy, six inches thick at the narrowest point. Each unit is rigidly constructed with an extra heavy cross brace between and below the impression cylinders.

Goss did not anticipate this war when the High Speed Anti-Friction Press was designed, but Goss engineers did build a press that admirably meets wartime conditions.

The Goss High Speed Anti-Friction Press was designed to insure quality printing at high sustained speed with substantial economies in power and upkeep. It was equipped with automatic pressure oiling to reduce dependence on the human factor, save lubricants, and avoid repairs. It was built to minimize web breaks and folder spoilage, thereby conserving newsprint.

By reducing friction and mechanical vibration, Goss engineers were able to cut the consumption of power. Precision methods in which some tolerances were held within 0.0001 inch—static and dynamic balance of all rapidly rotating parts—and 100% anti-friction construction with ball and roller bearings were factors in attaining the smooth operation that made this a dependable, long-lived press. It was also designed for safety and improved working conditions with all moving parts completely enclosed or protected and total enclosures from the fountains to the plate cylinders to confine ink mist to the units.

The same precision that went into the building of Goss presses is now applied to the production of naval ordnance, for which we won the Navy "E" and earned the right to fly the burgee with one star.

GOSS

THE GOSS PRINTING PRESS CO.
1535 S. PAULINA STREET, CHICAGO
NEW YORK • SAN FRANCISCO • LONDON

★ One shipyard recently launched a Liberty Ship ten days after laying the keel! In one plant giant bombers will roll off the assembly lines one-an-hour

WHY AMERICA can OUTBUILD SLAVES

YOU whose profession it is to print and publish truth and education, fearlessly, have evidence that the experiment of Freedom of Speech is proving its power in War. ✦ A century and a half ago Freedom of Speech, source of all freedoms, was a new idea in the world...an experiment of noble minds seeking respect for the dignity of man, and for the right of men created in His image to build a better world for their children. ✦ It was to be expected that such a people, bent only on making life fuller and longer, would meet initial set-backs in War from nations long scheming and preparing for ways to *destroy* life. ✦ But now when this Freedom is in danger, America is demonstrating that its 130 million educated, informed, and free people can turn their peacetime skills to War—and man-for-man they can easily outperform fanatical copyists and gestapo-driven slaves.

This is the fifth of a series of messages on the Freedom of the Press by INTERTYPE CORPORATION, *Brooklyn. Set in Baskerville.*